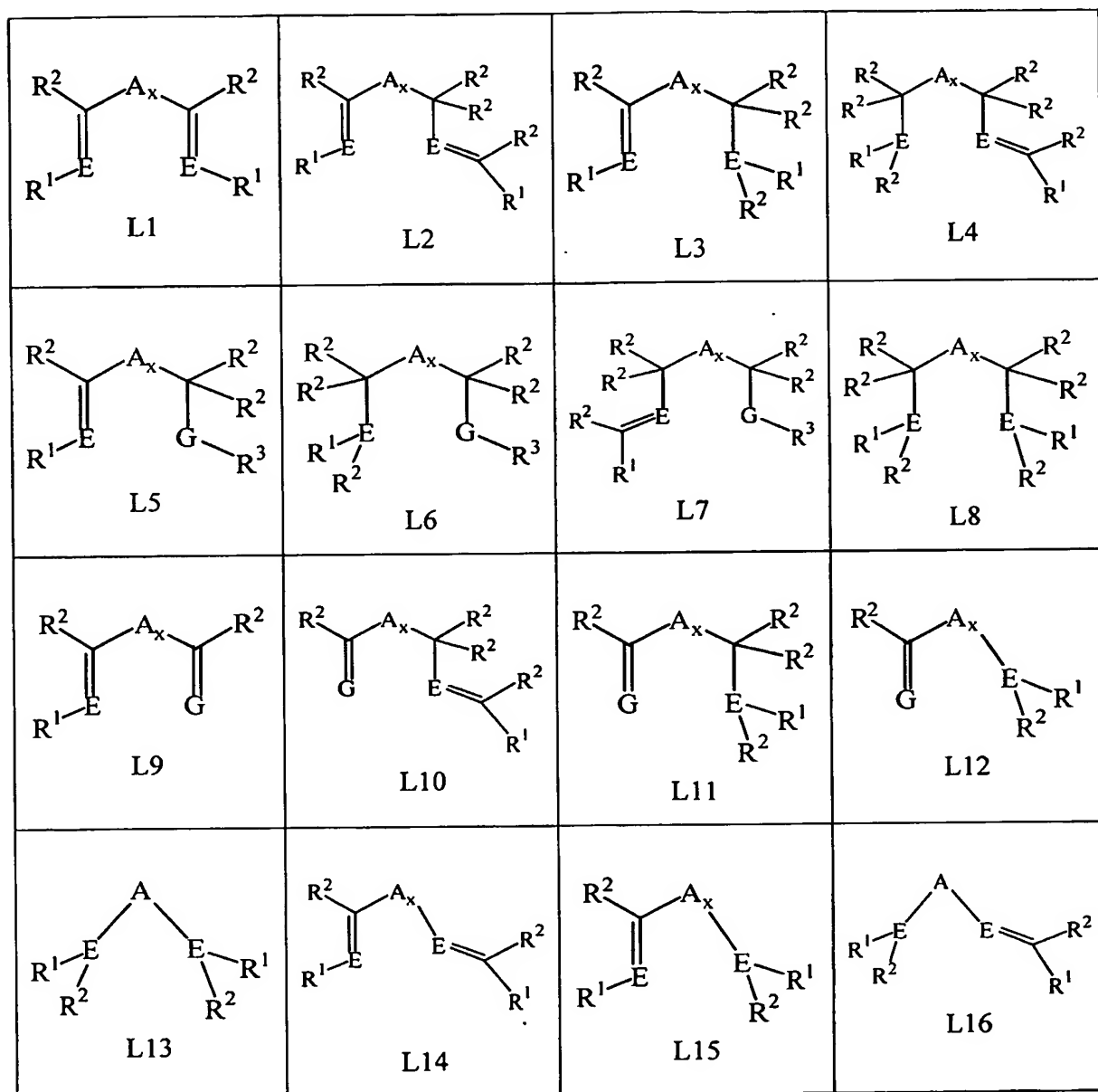


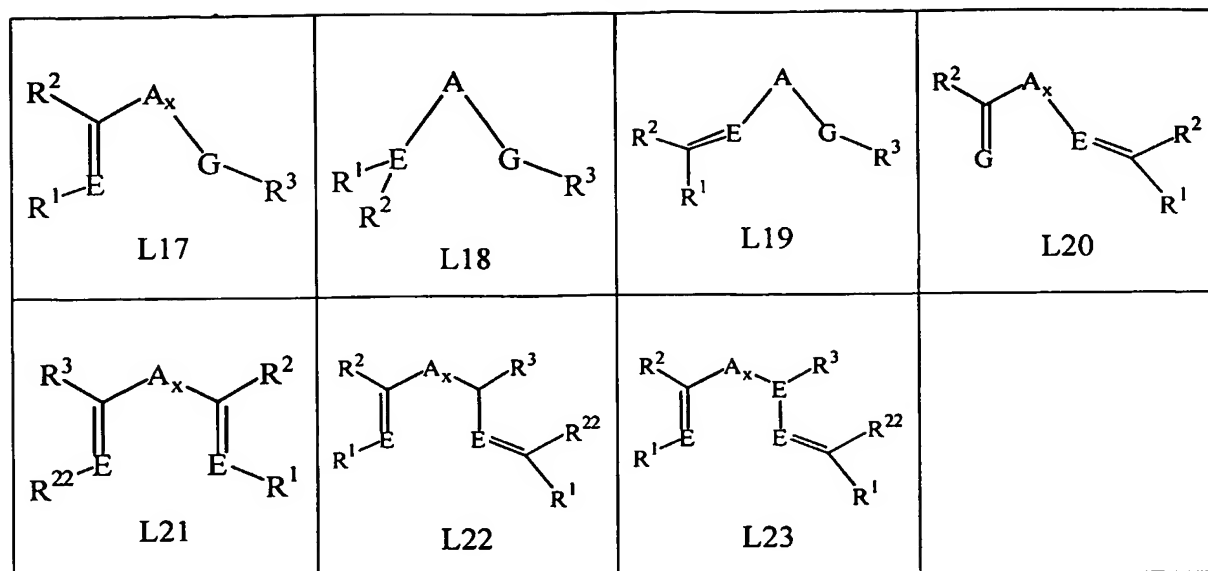
CLAIMS

1. A transition metal compound represented by the formula LMX wherein M is a Group 3 to 11 metal L is a bulky bidentate or tridentate neutral ligand that is bonded to M by two or three heteroatoms and at least one heteroatom is nitrogen; X is a substituted or unsubstituted catecholate ligand provided that the substituted catecholate ligand does not contain a 1,2-diketone functionality.
2. The compound of claim 1 where M is a Group 8, 9, 10 or 11 metal.
3. The compound of claim 1 wherein M is Fe, Ru, Os, Co, Rh, Ir, Ni, Pd, Pt, Cu, Ag or Au.
4. The compound of claim 1 wherein M is Fe, Co, Ni or Pd.
5. The compound of any of the above claims wherein L is not a ligand selected from the group consisting of: substituted and unsubstituted 2,2'-bipyridyl, 2,2'-biquinoliny, 2,2'-bipyrazinyl, 1,10-phenanthroline, dipyridin-2-yl-amine, dipyridin-2-yl-methane, *N*¹-(2-amino-ethyl)ethane-1,2-diamine, *N*¹-(3-amino-propyl)propane-1,3-diamine, ethane-1,2-diamine, propane-1,3-diamine, cyclohexane-1,2-diamine, *N,N,N',N'*-tetramethylethane-1,2-diamine, methyl-(2-methyliminoethylidene)amine, *N,N'*-bis(naphthalen-1-ylmethylene)ethane-1,2-diamine, *N,N'*-bis(naphthalen-1-ylmethylene)propane-1,3-diamine, *N,N'*-dibenzylidene-propane-1,3-diamine, *N*¹-naphthalen-1-ylmethylene-ethane-1,2-diamine, 2-[(3-amino-propylimino)methyl]phenol, 2,4,4-trimethyl-1,5,9-triaza-cyclododec-1-ene, 1,4,7-trimethyl-[1,4,7]triazonane, [2,2';6'2'']terpyridine, *N*-[2-dimethylaminoethyl)-*N,N',N'*-trimethylethane-1,2-diamine, cyclopenta[2,1-*b*;3,4-*b'*]dipyridin-5-one, 2-(2-pyridylsulfanyl)pyridine, 2-(2-pyridyloxy)pyridine, benzyl-bis(pyridin-2-ylmethyl)amine, 2-pyridin-2-yl-quinoxaline, *N*¹-ethylidene-ethane-1,2-diamine, and bis(1*H*-benzoimidazol-2-ylmethyl)amine where substitution refers to replacing one or more existing hydrogen atoms bonded to carbon with another atom or group of atoms; and 1,4-diaza-1,3-butadiene ligands

containing substituents in the 2 and or 3 positions containing trihydrocarbylsiloxy groups.

6. The compound of any of the above claims where L is represented by the formulae:





where each E is, independently, a Group 15 element that is bonded to M, provided that at least one E is nitrogen; G is a Group 16 element that is bonded to M; A is a bridging group containing a Group 13-16 element and an atom within A may optionally be bonded to M; x is 0 or 1; R¹ is, independently, a bulky hydrocarbyl, substituted bulky hydrocarbyl, bulky halocarbyl, or substituted bulky halocarbyl; R² is, independently, hydrogen, or a hydrocarbyl, substituted hydrocarbyl, halocarbyl, or substituted halocarbyl provided that a substituted hydrocarbyl is not substituted with trihydrocarbylsiloxy; R³ is, independently, hydrogen, or a hydrocarbyl, substituted hydrocarbyl, halocarbyl, or substituted halocarbyl provided that a substituted hydrocarbyl is not substituted with trihydrocarbylsiloxy, or R³ is a substituted hydrocarbyl group containing a heteroatom or silicon atom directly bonded to G, E or the indicated carbon atom; R²² is, independently, hydrogen, or a hydrocarbyl, substituted hydrocarbyl, halocarbyl, or substituted halocarbyl provided that a substituted hydrocarbyl is not substituted with trihydrocarbylsiloxy; and where

R¹, R² and/or R³ groups on the same atom, adjacent atoms or those separated by one additional atom may join together to form a substituted or unsubstituted, saturated, partially unsaturated or aromatic cyclic or polycyclic ring structure provided that for L1, both pair of R¹ and R² do not join to form a substituted or unsubstituted pyridine, pyrazine, pyrimidine or benzimidazole

ring;

R^{22} and R^3 may join together to form a substituted or unsubstituted, saturated, partially unsaturated or aromatic heterocyclic ring structure provided that for L21 and L22, R^1 and R^2 do not join to form a substituted or unsubstituted pyridine, pyrazine, pyrimidine or benzimidazole ring; and two R^2 bonded to the same atom together may form an $-one (=O)$, a thione $(=S)$, an $-imine (=NR''')$, or a $-carbene (=CR''')_2$ group where R''' is independently, hydrogen, hydrocarbyl, substituted hydrocarbyl, halocarbyl or substituted halocarbyl and two or more R''' on the same carbon may join together to form a substituted or unsubstituted, saturated, partially unsaturated, or aromatic cyclic or polycyclic substituent.

7. The compound of any of claims 1, 2, 3, 4, or 5 where L is represented by the formulae L*1 to L*410:

where

R^1 is, independently, a bulky hydrocarbyl, substituted bulky hydrocarbyl, bulky halocarbyl, or substituted bulky halocarbyl; R^2 is, independently, hydrogen, or a hydrocarbyl, substituted hydrocarbyl, halocarbyl, or substituted halocarbyl provided that a substituted hydrocarbyl is not substituted with trihydrocarbylsiloxy; R^3 is, independently, hydrogen, or a hydrocarbyl, substituted hydrocarbyl, halocarbyl, or substituted halocarbyl provided that a substituted hydrocarbyl is not substituted with trihydrocarbylsiloxy, or R^3 is a substituted hydrocarbyl group containing a heteroatom or silicon atom directly bonded to G, E or the indicated carbon atom; R^{22} is, independently, hydrogen, or a hydrocarbyl, substituted hydrocarbyl, halocarbyl, or substituted halocarbyl provided that a substituted hydrocarbyl is not substituted with trihydrocarbylsiloxy;

and where

R^1 , R^2 and/or R^3 groups on the same atom, adjacent atoms or those separated by one additional atom may join together to form a substituted or unsubstituted, saturated, partially unsaturated or aromatic cyclic or polycyclic ring structure provided that for L1, both pair of R^1 and R^2 do not join to form a substituted or unsubstituted pyridine, pyrazine, pyrimidine or benzimidazole ring;

R^{22} and R^3 may join together to form a substituted or unsubstituted, saturated, partially unsaturated or aromatic heterocyclic ring structure provided that for L21 and L22, R^1 and R^2 do not join to form a substituted or unsubstituted pyridine, pyrazine, pyrimidine or benzimidazole ring; and two R^2 bonded to the same atom together may form an $-one (=O)$, a thione $(=S)$, an $-imine (=NR''')$, or a $-carbene (=CR''')_2$ group where R''' is independently, hydrogen, hydrocarbyl, substituted hydrocarbyl, halocarbyl or substituted halocarbyl and two or more R''' on the same carbon may join together to form a substituted or unsubstituted, saturated, partially unsaturated, or aromatic cyclic or polycyclic substituent.

8. The compound of claim 6 or 7, where R^1 is selected from the group consisting of: all isomers and hydrocarbyl substituted isomers of propyl, butyl, pentyl, hexyl, heptyl, octyl, nonyl, decyl, undecyl, dodecyl, tridecyl, tetradecyl, pentadecyl, hexadecyl, heptadecyl, octadecyl, nonadecyl, eicosyl, heneicosyl, docosyl, tricosyl, tetracosyl, pentacosyl, hexacosyl, heptacosyl, octacosyl, nonacosyl, triacontyl, propenyl, butenyl, pentenyl, hexenyl, heptenyl, octenyl, nonenyl, decenyl, undecenyl, dodecenyl, tridecenyl, tetradecenyl, pentadecenyl, hexadecenyl, heptadecenyl, octadecenyl, nonadecenyl, eicosenyl, heneicosenyl, docosenyl, tricosenyl, tetracosenyl, pentacosenyl, hexacosenyl, heptacosenyl, octacosenyl, nonacosenyl, triacontenyl, propynyl, butynyl, pentynyl, hexynyl, heptynyl, octynyl, nonynyl, decynyl, undecynyl, dodecynyl, tridecynyl, tetradecynyl, pentadecynyl, hexadecynyl, heptadecynyl, octadecynyl, nonadecynyl, eicosynyl, heneicosynyl, docosynyl, tricosynyl, tetracosynyl, pentacosynyl, hexacosynyl, heptacosynyl, octacosynyl, nonacosynyl, and triacontynyl; perfluoropropyl, perfluorobutyl, perfluoropentyl, perfluorohexyl, perfluoroheptyl, perfluorooctyl, perfluorononyl, perfluorodecyl, perfluoroundecyl, perfluorododecyl, perfluorotridecyl, perfluorotetradecyl, perfluoropentadecyl, perfluorohexadecyl, perfluoroheptadecyl, perfluorooctadecyl, perfluorononadecyl, perfluoroeicosyl, perfluoroheneicosyl, perfluorodocosyl, perfluorotricosyl, perfluorotetracosyl, perfluoropentacosyl, perfluorohexacosyl, perfluoroheptacosyl, perfluorooctacosyl, perfluorononacosyl, perfluorotriacontyl, perfluorobutenyl, perfluorobutynyl,

[illegible]

trimethylsilyloctyl, trimethylsilylnonyl, trimethylsilyldecyl,
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trimethylsilylheptadecyl, trimethylsilyloctadecyl, trimethylsilylnonadecyl,
trimethylsilyleicosyl, trimethylsilylheneicosyl, trimethylsilyldocosyl,
trimethylsilyltricosyl, trimethylsilyltetracosyl, trimethylsilylpentacosyl,
trimethylsilylhexacosyl, trimethylsilylheptacosyl, trimethylsilyloctacosyl,
trimethylsilylnonacosyl, trimethylsilyltriacontyl, methylphenyl,
dimethylphenyl, trimethylphenyl, tetramethylphenyl, pentamethylphenyl
ethylphenyl, diethylphenyl, triethylphenyl, tetraethylphenyl, pentaethylphenyl,
propylphenyl, dipropylphenyl, tripropylphenyl, tetrapropylphenyl,
pentapropylphenyl butylphenyl, dibutylphenyl, tributylphenyl,
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propylbutylphenyl, propylpentylphenyl, propylhexylphenyl,
butylpentylphenyl, butylhexylphenyl, methoxyphenyl, ethoxyphenyl,
propoxyphenyl, butoxyphenyl, pentoxyphenyl, hexoxyphenyl,
dimethoxyphenyl, phenoxyphenyl, methylmethoxyphenyl,
dimethylaminophenyl, dipropylaminophenyl, bis(dimethylamino)phenyl,
methyl(dimethylamino)phenyl, trimethylsilylphenyl, trimethylgermylphenyl,
trifluoromethylphenyl, bis(trifluoromethyl)phenyl, trifluoromethoxyphenyl,
halophenyl, dihalophenyl, trihalophenyl, tetrahalophenyl, and
pentahalophenyl, halomethylphenyl, dihalomethylphenyl,
trihalomethylphenyl, tetrahalomethylphenyl, haloethylphenyl,
dihaloethylphenyl, trihaloethylphenyl, tetrahaloethylphenyl, haloethylphenyl,

dihalopropylphenyl, trihalopropylphenyl, tetrahalopropylphenyl, halobutylphenyl, dihalobutylphenyl, trihalobutylphenyl, tetrahalobutylphenyl, dihalodimethylphenyl, dihalo(trifluoromethyl)phenyl (where halo is, independently, fluoro, chloro, bromo and iodo), methylbenzyl, dimethylbenzyl, trimethylbenzyl, tetramethylbenzyl, pentamethylbenzyl ethylbenzyl, diethylbenzyl, triethylbenzyl, tetraethylbenzyl, pentaethylbenzyl, propylbenzyl, dipropylbenzyl, tripropylbenzyl, tetrapropylbenzyl, pentapropylbenzyl butylbenzyl, dibutylbenzyl, tributylbenzyl, tetrabutylbenzyl, pentabutylbenzyl, hexylbenzyl, dihexylbenzyl, trihexylbenzyl, tetrahexylbenzyl, pentaethylbenzyl, dimethylethylbenzyl, dimethylpropylbenzyl, dimethylbutylbenzyl, dimethylpentylbenzyl, dimethylhexylbenzyl, diethylmethylbenzyl, diethylpropylbenzyl, diethylbutylbenzyl, diethylpentylbenzyl, diethylhexylbenzyl, dipropylmethylbenzyl, dipropylethylbenzyl, dipropylbutylbenzyl, dipropylpentylbenzyl, dipropylhexylbenzyl, dibutylmethylbenzyl, dibutylethylbenzyl, dibutylpropylbenzyl, dibutylpentylbenzyl, dibutylhexylbenzyl, methylethylbenzyl, methylpropylbenzyl, methylbutylbenzyl, methylpentylbenzyl, methylhexylbenzyl, ethylpropylbenzyl, ethylbutylbenzyl, ethylpentylbenzyl, ethylhexylbenzyl, propylbutylbenzyl, propylpentylbenzyl, propylhexylbenzyl, butylpentylbenzyl, butylhexylbenzyl, methoxybenzyl, ethoxybenzyl, propoxybenzyl, butoxybenzyl, pentoxybenzyl, hexoxybenzyl, dimethoxybenzyl, phenoxybenzyl, methylmethoxybenzyl, dimethylaminobenzyl, dipropylaminobenzyl, bis(dimethylamino)benzyl, methyl(dimethylamino)benzyl, trifluoromethylbenzyl, bis(trifluoromethylbenzyl), trifluoromethoxybenzyl, trimethylsilylbenzyl, bis(trimethylsilyl)benzyl, trimethylgermylbenzyl, diphenylmethyl, trimethylsilyl, trimethylgermyl, trimethylstannyl, trimethylplumbyl, triethylsilyl, triethylgermyl, dimethylethylsilyl, dimethylethylgermyl, diethylmethylsilyl, diethylmethylgermyl, triphenylsilyl, triphenylgermyl, triphenoxysilyl, triphenoxygermyl, trimethoxysilyl, trimethoxygermyl, triethoxysilyl, triethoxygermyl, and all isomers of tripropylsilyl, tripropylgermyl, tributylsilyl, tributylgermyl, tripropoxysilyl, tripropoxygermyl, tributoxysilyl, tributoxygermyl, tris(trifluoromethyl)silyl,

bis(perfluoromethyl)methylsilyl, pyrenyl, aceanthrylenyl, acenaphthylene, acephenanthrylenyl, azulenyl biphenylenyl, chrysenyl, coronenyl, fluoranthenyl, fluorenyl, heptacenyl, heptalenyl, heptaphenyl, hexacenyl, hexaphenyl, *as*-indacenyl, *s*-indecenyl, indenyl, ovalenyl, pentacenyl, pentalenyl, pentaphenyl, perylenyl, phenalenyl, phenanthrenyl, picenyl, pleiadenyl, pyranhrenyl, rubicenyl, naphthacenyl, tetraphenylenyl, trinaphthylenyl, triphenylenyl, hexahelicenyl, naphthyl, anthracenyl, dibenza[*a,b*]anthracenyl, indanyl, acenaphthenyl, cholanthrenyl, aceanthrenyl, acephenanthrenyl, 1,2,3,4-tetrahydronaphthalene, fullereryl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cyclohexenyl, cycloheptyl, cyclooctyl, cyclononyl, cyclodecyl, cycloundecyl, and cyclododecyl, dimethylcyclohexyl, norbornyl, norbornenyl, adamantyl, cubanyl, prismanyl, spiro[4,5]decanyl, biphenyl, bicyclopentyl, terphenyl, quatercyclohexanyl, binaphthyl, binorbornyl, phenyl-terphenyl, 1,1-diphenylmethano, 1,1-dinaphthylethene, acridarsinyl, acridinyl, acridophosphinyl, 1*H*-acridolinyl, anthrazinyl, anthyridinyl, arsanthridinyl, arsinolyl, arsinoliziny, arsinoliziny, arsinoliziny, benzofuranyl, carbazolyl, β -carbolinyl, chromenyl, thiochromenyl, cinnolinyl, furanyl, imidazolyl, indazolyl, indolyl, indoliziny, isoarsindolyl, isoarsinolyl, isobenzofuranyl, isochromenyl, isothiochromenyl, isoindolyl, isophosphindolyl, isophosphinolyl, isoquinolinyl, isothiazolyl, isoxazolyl, naphthyridinyl, oxazolyl, perimidinyl, phenanthrazinyl, phenanthridinyl, phenanthrolinyl, phenazinyl, phosphanthridinyl, phosphindolyl, phosphindoliziny, phosphinoliziny, phthalazinyl, pteridinyl, phthaloperinyl, purinyl, pyranyl, thiopyranal, pyrazinyl, pyrazolyl, pyridazinyl, pyridinyl, pyrindinyl, pyrimidinyl, pyrrolyl, pyrroliziny, quinazolinyl, quindolinyl, 1*H*-quinindolinyl, quinolinyl, quinoliziny, quinoxalinyl, selenophenyl, thebenidinyl, thiazolyl, thiophenyl, triphenodioxazinyl, triphenodithiazinyl, xanthenyl, chromanyl, thiochromanyl, imidazolidinyl, indolinyl, isochromanyl, isothiochromanyl, isoindolinyl, morpholinyl, piperazinyl, piperidinyl, pyroolidinyl, pyrrolidinyl, quinuclidinyl, dimethylacridarsinyl, dimethylacridinyl, dimethylacridophosphinyl, dimethyl-1*H*-acridolinyl, dimethylanthrazinyl, dimethylanthyridinyl, dimethylarsanthridinyl, dimethylarsindolyl,

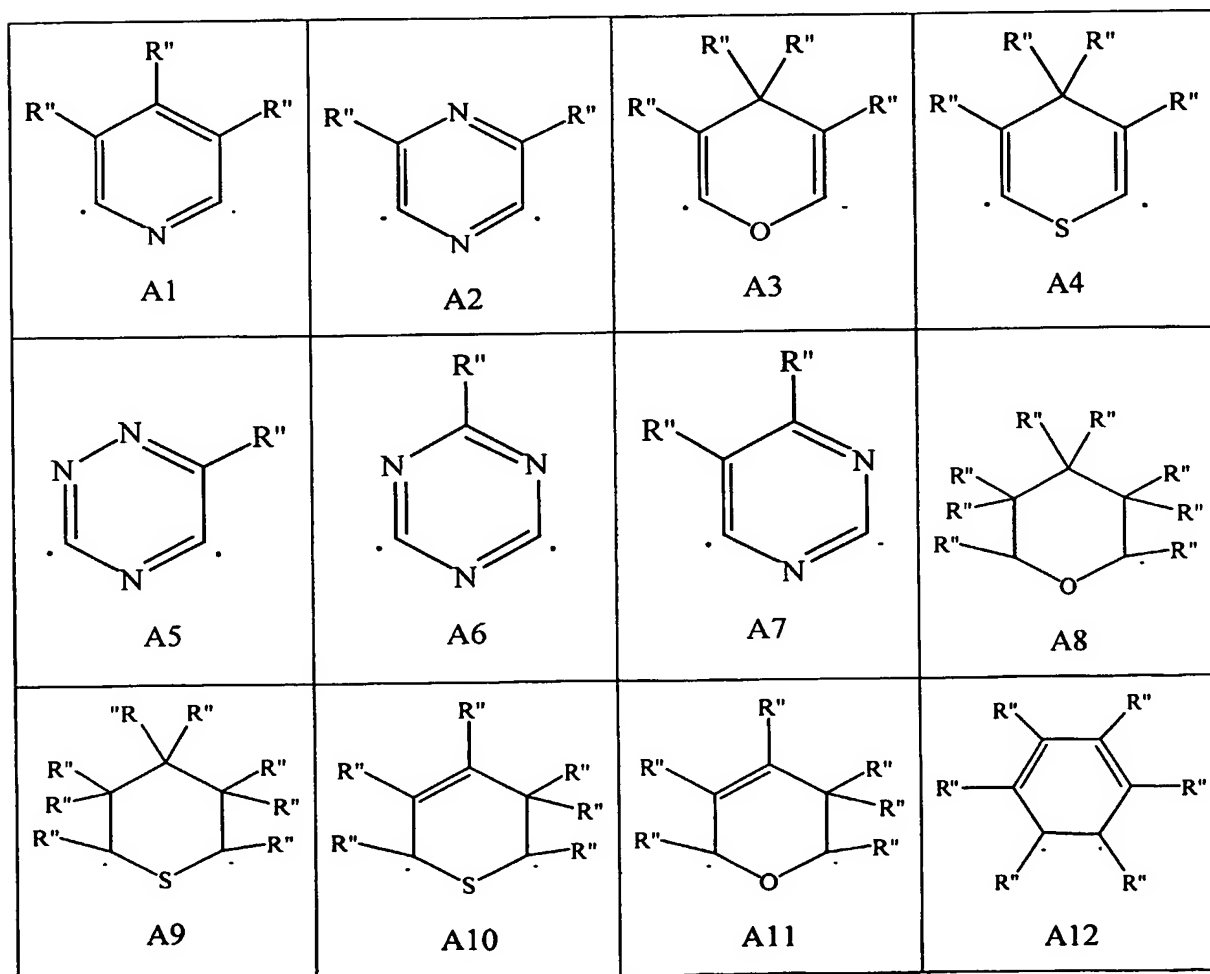
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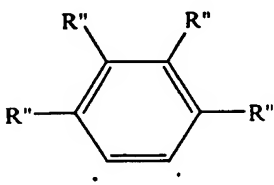
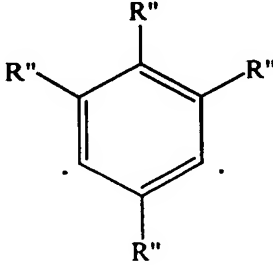
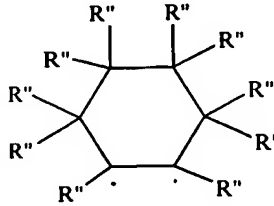
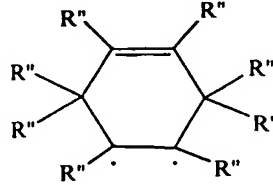
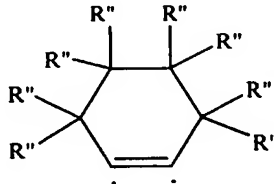
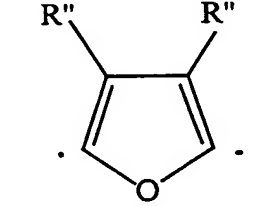
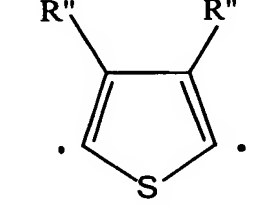
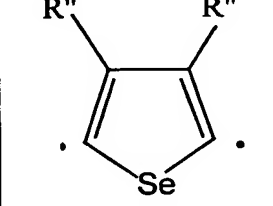
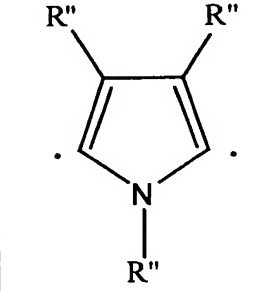
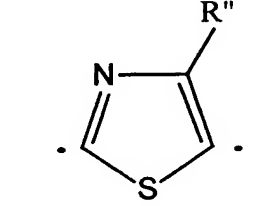
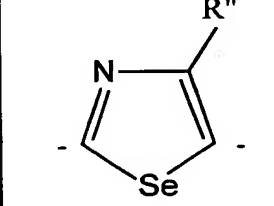
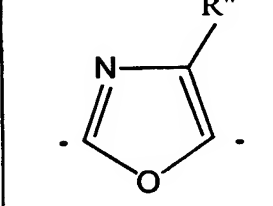
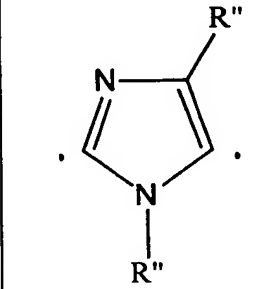
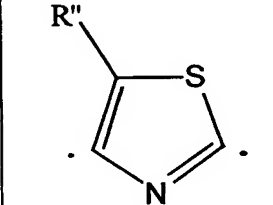
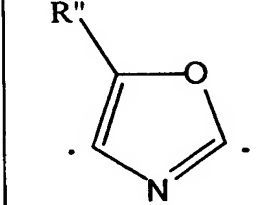
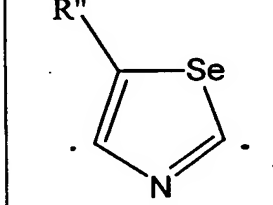
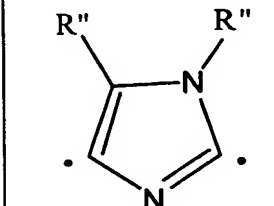
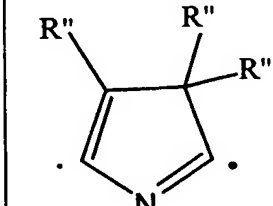
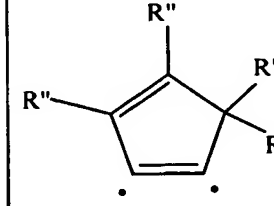
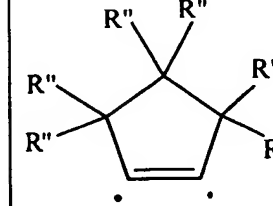
9. The compound of claim 6 where A is represented by the following formulae:

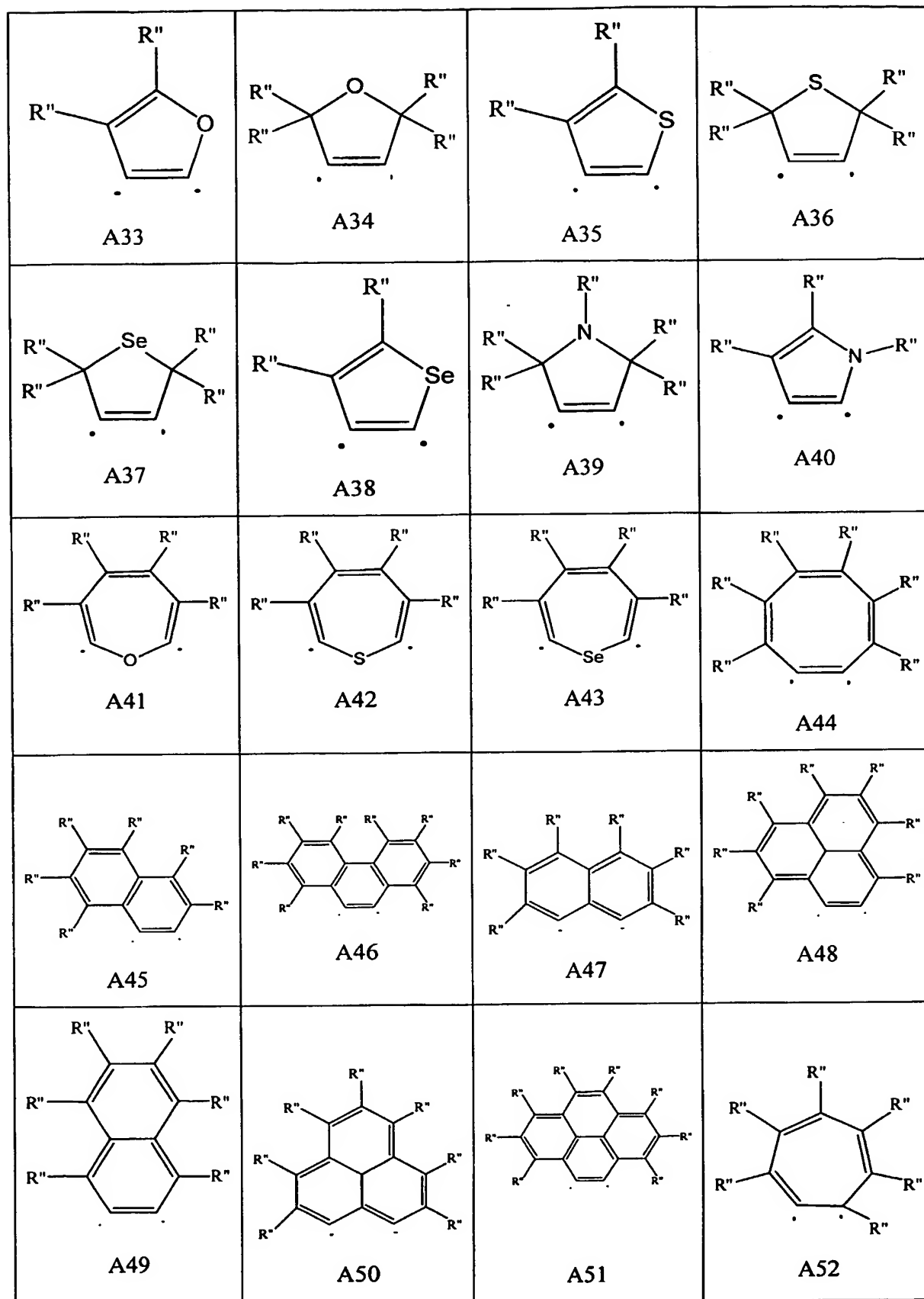
R'_2C , R'_2Si , R'_2Ge , $R'_2CCR'_2$, $R'_2CCR'_2CR'_2$, $R'_2CCR'_2CR'_2CR'_2$,
 $R'C=CR'$, $R'C=CR'CR'_2$, $R'_2CCR'=CR'CR'_2$, $R'C=CR'CR'=CR'$,
 $R'C=CR'CR'_2CR'_2$, $R'_2CSiR'_2$, $R'_2SiSiR'_2$, $R'_2CSiR'_2CR'_2$, $R'_2SiCR'_2SiR'_2$,
 $R'C=CR'SiR'_2$, $R'_2CGeR'_2$, $R'_2GeGeR'_2$, $R'_2CGeR'_2CR'_2$, $R'_2GeCR'_2GeR'_2$,
 $R'_2SiGeR'_2$, $R'C=CR'GeR'_2$, $R'B$, R'_2C-BR' , $R'_2C-BR'-CR'_2$, $R'N$, $R'P$, O ,

S, Se, C(=O)C(=O), R'₂CC(=O), R'₂CC(=O)CR'₂, R'₂C-O-CR'₂, R'₂CR'₂C-O-CR'₂CR'₂, R'₂C-O-CR'₂CR'₂, R'₂C-O-CR'=CR', R'₂C-S-CR'₂, R'₂CR'₂C-S-CR'₂CR'₂, R'₂C-S-CR'₂CR'₂, R'₂C-S-CR'=CR', R'₂C-Se-CR'₂, R'₂CR'₂C-Se-CR'₂CR'₂, R'₂C-Se-CR'₂CR'₂, R'₂C-Se-CR'=CR', R'₂C-N=CR', R'₂C-NR'-CR'₂, R'₂C-NR'-CR'₂CR'₂, R'₂C-NR'-CR'=CR', R'₂CR'₂C-NR'-CR'₂CR'₂, R'₂C-P=CR', and R'₂C-PR'-CR'₂ where each R' is, independently, hydrogen, hydrocarbyl, substituted hydrocarbyl, halocarbyl or substituted halocarbyl provided that a substituted hydrocarbyl is not substituted with trihydrocarbylsiloxy, and two or more R' on the same carbon or adjacent R' may join together to form a substituted or unsubstituted, saturated, partially unsaturated, or aromatic cyclic or polycyclic substituent.

10. The compound of claim 6 where A is represented by the formulae:

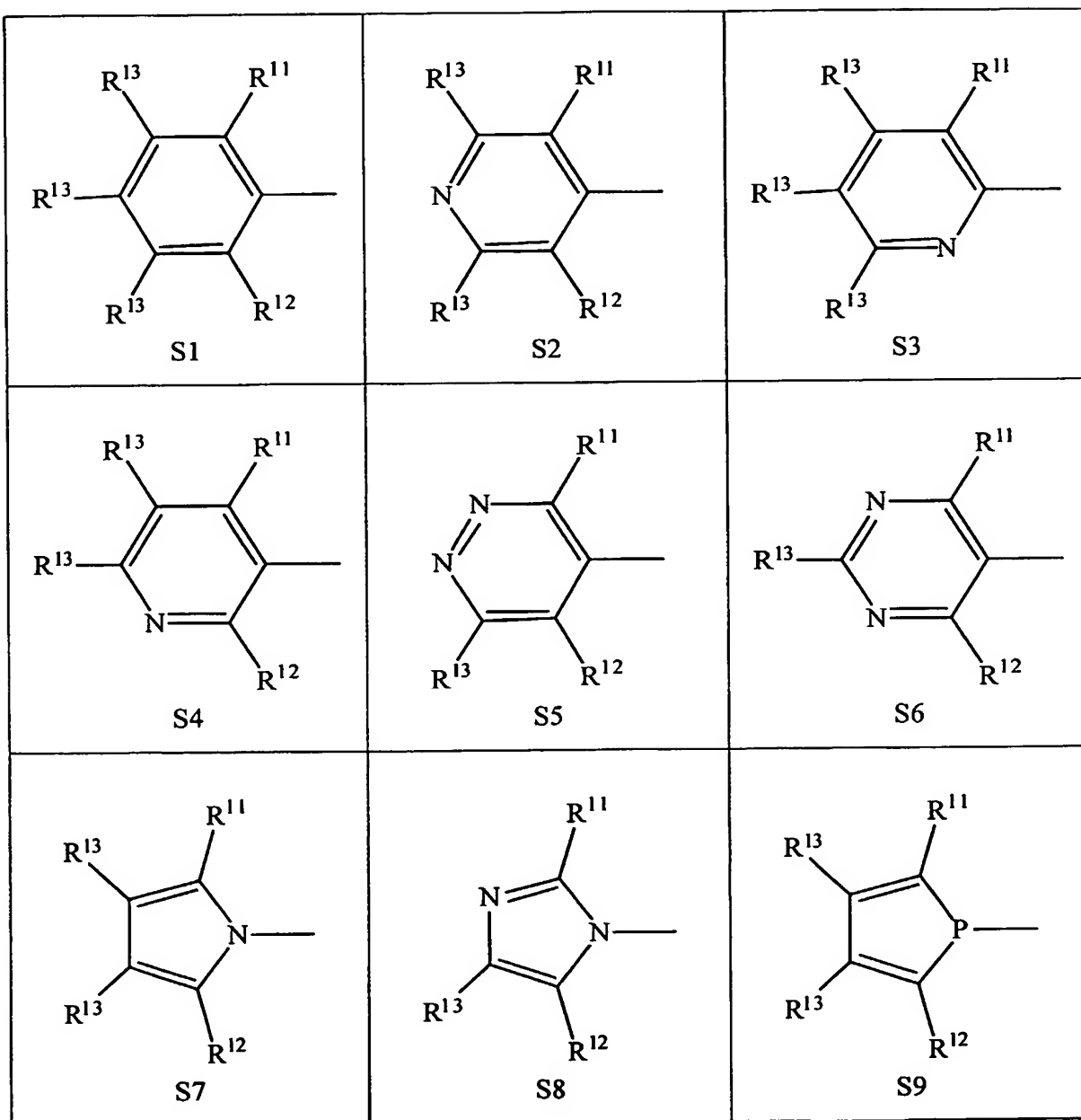


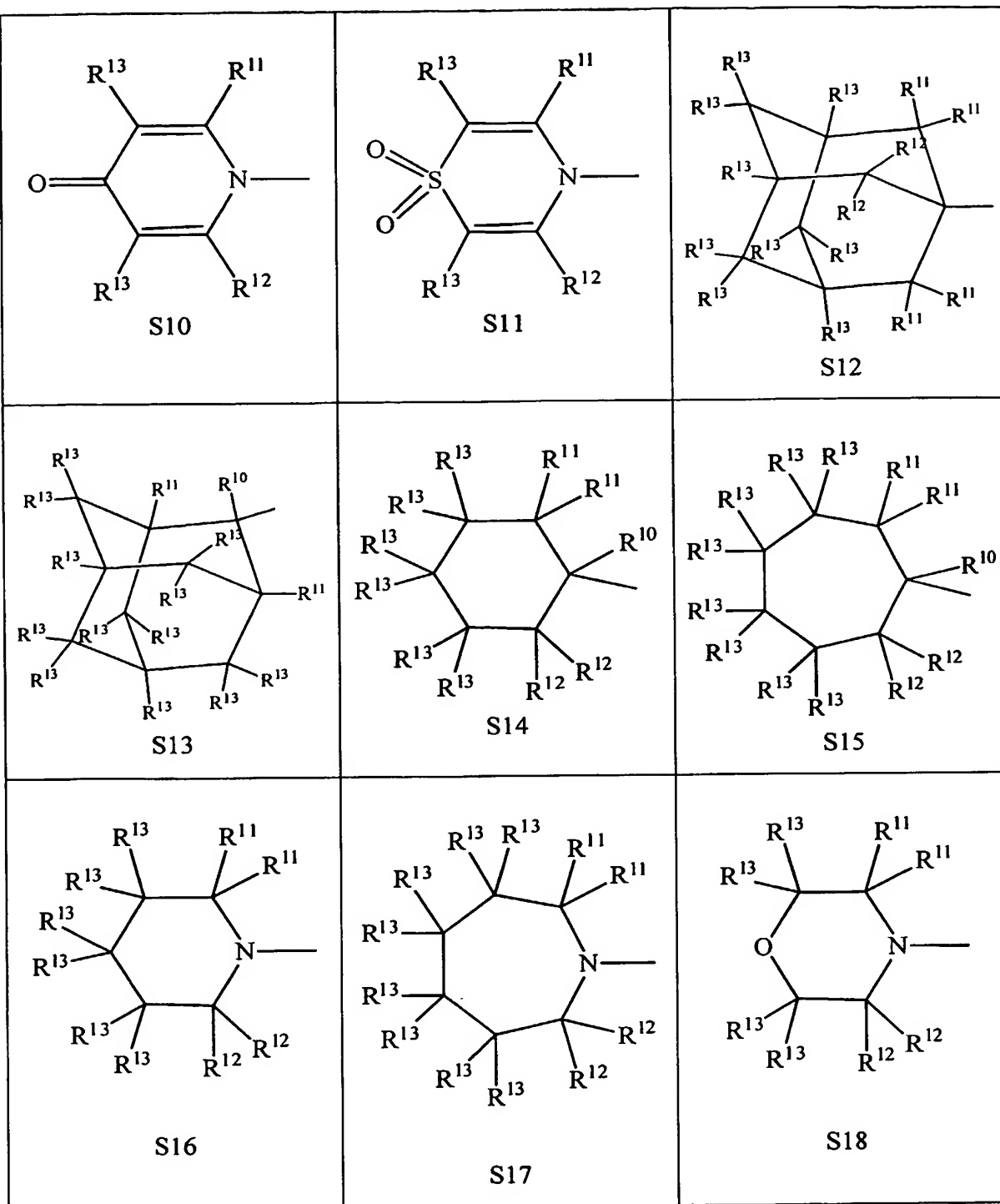
| | | | |
|--|--|---|--|
|  <p>A13</p> |  <p>A14</p> |  <p>A15</p> |  <p>A16</p> |
|  <p>A17</p> |  <p>A18</p> |  <p>A19</p> |  <p>A20</p> |
|  <p>A21</p> |  <p>A22</p> |  <p>A23</p> |  <p>A24</p> |
|  <p>A25</p> |  <p>A26</p> |  <p>A27</p> |  <p>A28</p> |
|  <p>A29</p> |  <p>A30</p> |  <p>A31</p> |  <p>A32</p> |

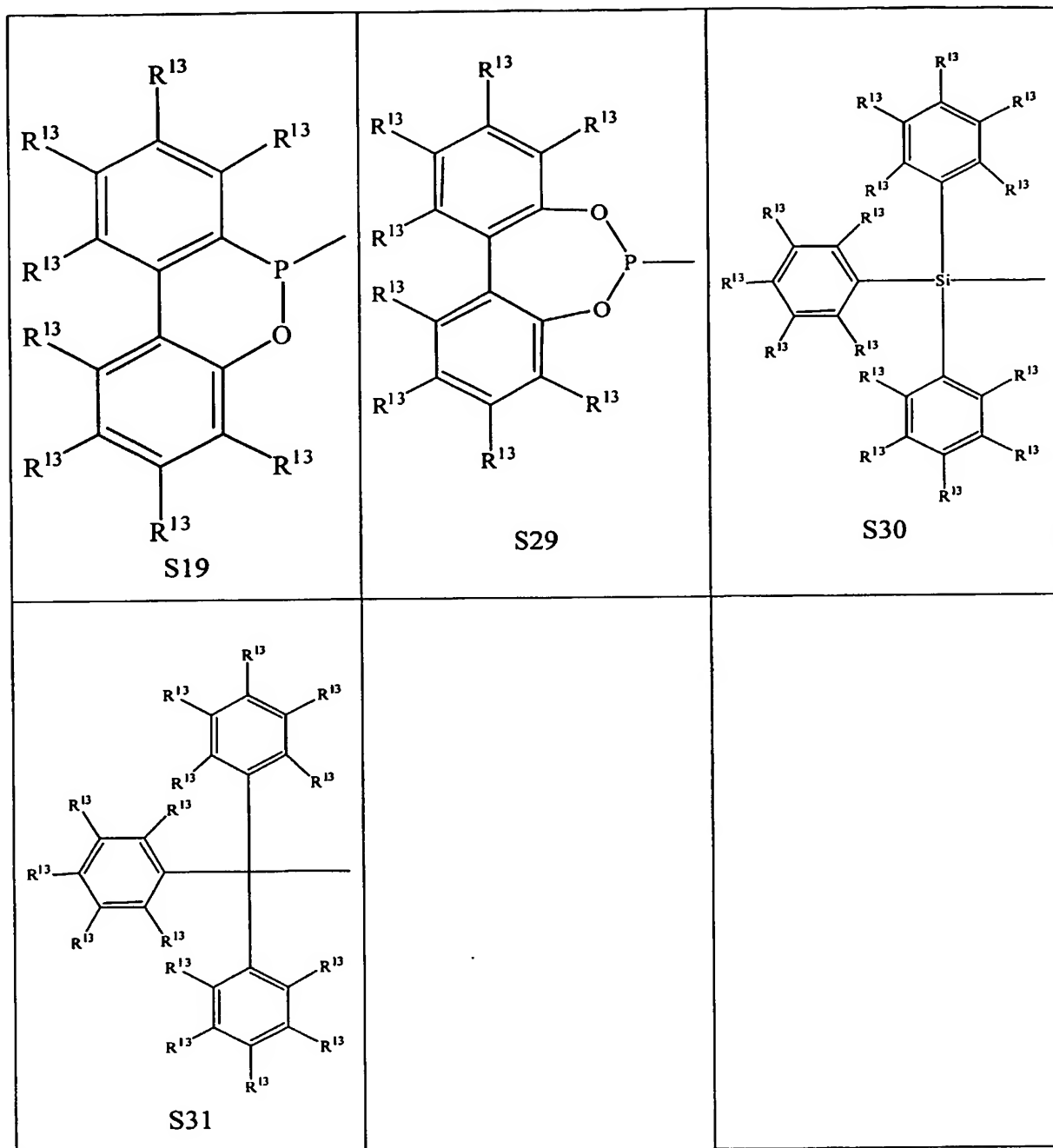


where R'' is, independently, hydrogen, hydrocarbyl, substituted hydrocarbyl, halocarbyl or substituted halocarbyl provided that a substituted hydrocarbyl is not substituted with trihydrocarbylsiloxy, and two or more R'' on the same carbon or adjacent R'' may join together to form a substituted or unsubstituted, saturated, partially unsaturated, or aromatic cyclic or polycyclic substituent and where the bonding points are designated by the dots.

11. The compound of claim 6 or 7 where R¹ is represented by the formulae:







where R^{10} , R^{11} , R^{12} , and R^{13} are, independently, hydrogen, hydrocarbyl radicals, substituted hydrocarbyl radicals, halocarbyl radicals, substituted halocarbyl radicals, silylcarbyl radicals or polar radicals and R^{10} , R^{11} , R^{12} , and/or R^{13} on the same atom or adjacent atoms may join together to form a substituted or unsubstituted saturated, partially unsaturated or aromatic cyclic or polycyclic ring structure.

12. The composition of claim 11 wherein R^{10} , R^{11} , R^{12} , and R^{13} are, independently selected from the group consisting of: hydrogen, methyl, ethyl, ethenyl, ethynyl and all isomers of propyl, butyl, pentyl, hexyl, heptyl, octyl, nonyl, decyl, undecyl, dodecyl, tridecyl, tetradecyl, pentadecyl, hexadecyl, heptadecyl, octadecyl, nonadecyl, eicosyl, heneicosyl, docosyl, tricosyl, tetracosyl, pentacosyl, hexacosyl, heptacosyl, octacosyl, nonacosyl, triacontyl, propenyl, butenyl, pentenyl, hexenyl, heptenyl, octenyl, nonenyl, decenyl, undecenyl, dodecenyl, tridecenyl, tetradecenyl, pentadecenyl, hexadecenyl, heptadecenyl, octadecenyl, nonadecenyl, eicosenyl, heneicosenyl, docosenyl, tricosenyl, tetracosenyl, pentacosenyl, hexacosenyl, heptacosenyl, octacosenyl, nonacosenyl, triacontenyl, propynyl, butynyl, pentynyl, hexynyl, heptynyl, octynyl, nonynyl, decynyl, undecynyl, dodecynyl, tridecynyl, tetradecynyl, pentadecynyl, hexadecynyl, heptadecynyl, octadecynyl, nonadecynyl, eicosynyl, heneicosynyl, docosynyl, tricosynyl, tetracosynyl, pentacosynyl, hexacosynyl, heptacosynyl, octacosynyl, nonacosynyl, triacontynyl, perfluoropropyl, perfluorobutyl, perfluoropentyl, perfluorohexyl, perfluoroheptyl, perfluorooctyl, perfluorononyl, perfluorodecyl, perfluoroundecyl, perfluorododecyl, perfluorotridecyl, perfluorotetradecyl, perfluoropentadecyl, perfluorohexadecyl, perfluoroheptadecyl, perfluorooctadecyl, perfluorononadecyl, perfluoroeicosyl, perfluoroheneicosyl, perfluorodocosyl, perfluorotricosyl, perfluorotetracosyl, perfluoropentacosyl, perfluorohexacosyl, perfluoroheptacosyl, perfluorooctacosyl, perfluorononacosyl, perfluorotriacontyl, perfluorobutenyl, perfluorobutynyl, fluoropropyl, fluorobutyl, fluoropentyl, fluorohexyl, fluoroheptyl, fluorooctyl, fluorononyl, fluorodecyl, fluoroundecyl, fluorododecyl, fluorotridecyl, fluorotetradecyl, fluoropentadecyl, fluorohexadecyl, fluoroheptadecyl, fluorooctadecyl, fluorononadecyl, fluoroeicosyl, fluoroheneicosyl, fluorodocosyl, fluorotricosyl, fluorotetracosyl, fluoropentacosyl, fluorohexacosyl, fluoroheptacosyl, fluorooctacosyl, fluorononacosyl, fluorotriacontyl, difluorobutyl, trifluorobutyl, tetrafluorobutyl, pentafluorobutyl, hexafluorobutyl, heptafluorobutyl, octafluorobutyl, methoxypropyl, methoxybutyl, methoxypentyl, methoxyhexyl, methoxyheptyl, methoxyoctyl, methoxynonyl, methoxydecyl,

methoxyundecyl, methoxydodecyl, methoxytridecyl, methoxytetradecyl, methoxypentadecyl, methoxyhexadecyl, methoxyheptadecyl, methoxyoctadecyl, methoxynonadecyl, methoxyeicosyl, methoxyheneicosyl, methoxydocosyl, methoxytricosyl, methoxytetracosyl, methoxypentacosyl, methoxyhexacosyl, methoxyheptacosyl, methoxyoctacosyl, methoxynonacosyl, methoxytriacontyl, butoxypropyl, butoxybutyl, butoxypentyl, butoxyhexyl, butoxyheptyl, butoxyoctyl, butoxynonyl, butoxydecyl, butoxyundecyl, butoxydodecyl, butoxytridecyl, butoxytetradecyl, butoxypentadecyl, butoxyhexadecyl, butoxyheptadecyl, butoxyoctadecyl, butoxynonadecyl, butoxyeicosyl, butoxyheneicosyl, butoxydocosyl, butoxytricosyl, butoxytetracosyl, butoxypentacosyl, butoxyhexacosyl, butoxyheptacosyl, butoxyoctacosyl, butoxynonacosyl, butoxytriacontyl, dimethylaminopropyl, dimethylaminobutyl, dimethylaminopentyl, dimethylaminohexyl, dimethylaminoheptyl, dimethylaminooctyl, dimethylaminononyl, dimethylaminodecyl, dimethylaminoundecyl, dimethylaminododecyl, dimethylaminotridecyl, dimethylaminotetradecyl, dimethylaminopentadecyl, dimethylaminohexadecyl, dimethylaminoheptadecyl, dimethylaminooctadecyl, dimethylaminononadecyl, dimethylaminoeicosyl, dimethylaminoheneicosyl, dimethylaminodocosyl, dimethylaminotricosyl, dimethylaminotetracosyl, dimethylaminopentacosyl, dimethylaminohexacosyl, dimethylaminoheptacosyl, dimethylaminooctacosyl, dimethylaminononacosyl, dimethylaminotriacontyl, trimethylsilylpropyl, trimethylsilylbutyl, trimethylsilylpentyl, trimethylsilylhexyl, trimethylsilylheptyl, trimethylsilyloctyl, trimethylsilylnonyl, trimethylsilyldecyl, trimethylsilylundecyl, trimethylsilyldodecyl, trimethylsilyltridecyl, trimethylsilyltetradecyl, trimethylsilylpentadecyl, trimethylsilylhexadecyl, trimethylsilylheptadecyl, trimethylsilyloctadecyl, trimethylsilylnonadecyl, trimethylsilyleicosyl, trimethylsilylheneicosyl, trimethylsilyldocosyl, trimethylsilyltricosyl, trimethylsilyltetracosyl, trimethylsilylpentacosyl, trimethylsilylhexacosyl, trimethylsilylheptacosyl, trimethylsilyloctacosyl, trimethylsilylnonacosyl, trimethylsilyltriacontyl, phenyl, methylphenyl, dimethylphenyl, trimethylphenyl, tetramethylphenyl, pentamethylphenyl, ethylphenyl, diethylphenyl, triethylphenyl, tetraethylphenyl, pentaethylphenyl,

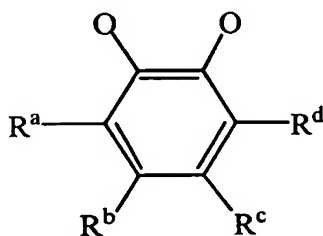
propylphenyl, dipropylphenyl, tripropylphenyl, tetrapropylphenyl, pentapropylphenyl butylphenyl, dibutylphenyl, tributylphenyl, tetrabutylphenyl, pentabutylphenyl, hexylphenyl, dihexylphenyl, trihexylphenyl, tetrahexylphenyl, pentahexylphenyl, dimethylethylphenyl, dimethylpropylphenyl, dimethylbutylphenyl, dimethylpentylphenyl, dimethylhexylphenyl, diethylmethylphenyl, diethylpropylphenyl, diethylbutylphenyl, diethylpentylphenyl, diethylhexylphenyl, dipropylmethylphenyl, dipropylethylphenyl, dipropylbutylphenyl, dipropylpentylphenyl, dipropylhexylphenyl, dibutylmethylphenyl, dibutylethylphenyl, dibutylpropylphenyl, dibutylpentylphenyl, dibutylhexylphenyl, methylethylphenyl, methylpropylphenyl, methylbutylphenyl, methylpentylphenyl, methylhexylphenyl, ethylpropylphenyl, ethylbutylphenyl, ethylpentylphenyl, ethylhexylphenyl, propylbutylphenyl, propylpentylphenyl, propylhexylphenyl, butylpentylphenyl, butylhexylphenyl, trimethylsilylphenyl, trimethylgermylphenyl, trifluoromethylphenyl, bis(trifluoromethyl)phenyl, halophenyl, dihalophenyl, trihalophenyl, tetrahalophenyl, pentahalophenyl; halomethylphenyl, dihalomethylphenyl, trihalomethylphenyl, tetrahalomethylphenyl, haloethylphenyl, dihaloethylphenyl, trihaloethylphenyl, tetrahaloethylphenyl, halopropylphenyl, dihalopropylphenyl, trihalopropylphenyl, tetrahalopropylphenyl, halobutylphenyl, dihalobutylphenyl, trihalobutylphenyl, tetrahalobutylphenyl, dihalodimethylphenyl, dihalo(trifluoromethyl)phenyl (where halo is, independently, fluoro, chloro, bromo and iodo), benzyl, methylbenzyl, dimethylbenzyl, trimethylbenzyl, tetramethylbenzyl, pentamethylbenzyl ethylbenzyl, diethylbenzyl, triethylbenzyl, tetraethylbenzyl, pentaethylbenzyl, propylbenzyl, dipropylbenzyl, tripropylbenzyl, tetrapropylbenzyl, pentapropylbenzyl butylbenzyl, dibutylbenzyl, tributylbenzyl, tetrabutylbenzyl, pentabutylbenzyl, hexylbenzyl, dihexylbenzyl, trihexylbenzyl, tetrahexylbenzyl, pentahexylbenzyl, dimethylethylbenzyl, dimethylpropylbenzyl, dimethylbutylbenzyl, dimethylpentylbenzyl, dimethylhexylbenzyl, diethylmethylbenzyl, diethylpropylbenzyl, diethylbutylbenzyl, diethylpentylbenzyl, diethylhexylbenzyl, dipropylmethylbenzyl, dipropylethylbenzyl, dipropylbutylbenzyl,

dipropylpentylbenzyl, dipropylhexylbenzyl, dibutylmethylbenzyl, dibutylethylbenzyl, dibutylpropylbenzyl, dibutylpentylbenzyl, dibutylhexylbenzyl, methylethylbenzyl, methylpropylbenzyl, methylbutylbenzyl, methylpentylbenzyl, methylhexylbenzyl, ethylpropylbenzyl, ethylbutylbenzyl, ethylpentylbenzyl, ethylhexylbenzyl, propylbutylbenzyl, propylpentylbenzyl, propylhexylbenzyl, butylpentylbenzyl, butylhexylbenzyl, trimethylsilylbenzyl, bis(trimethylsilyl)benzyl, trimethylgermylbenzyl, diphenylmethyl, trimethylsilyl, trimethylgermyl, trimethylstannyl, trimethylplumbyl, triethylsilyl, triethylgermyl, dimethylethylsilyl, dimethylethylgermyl, diethylmethylsilyl, diethylmethylgermyl, triphenylsilyl, triphenylgermyl, tripropylsilyl, tripropylgermyl, tributylsilyl, tributylgermyl, tris(trifluormethyl)silyl, bis(perfluoromethyl)methylsilyl, pyrenyl, aceanthrylenyl, acenaphthylene, acephenanthrylenyl, azulenyl biphenylenyl, chrysenyl, coronenyl, fluoranthenyl, fluorenyl, heptacenyl, heptalenyl, heptaphenyl, hexacenyl, hexaphenyl, *as*-indacenyl, *s*-indecenyl, indenyl, ovalenyl, pentacenyl, pentalenyl, pentaphenyl, perylenyl, phenalenyl, phenanthrenyl, picenyl, pleiadenyl, pyranthrenyl, rubicenyl, naphthacenyl, tetraphenylenyl, trinaphthylenyl, triphenylenyl, hexahelicenyl, naphthyl, anthracenyl, dibenza[*a,b*]anthracenyl, indanyl, acenaphthenyl, cholanthrenyl, aceanthrenyl, acephenanthrenyl, 1,2,3,4-tetrahydronaphthalene, fullereryl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cyclohexenyl, cycloheptyl, cyclooctyl, cyclononyl, cyclodecyl, cycloundecyl, and cyclododecyl, dimethylcyclohexyl, norbornyl, norbornenyl, adamantyl, cubanyl, prismanyl, spiro[4,5]decanyl, biphenyl, bicyclopentyl, terphenyl, quatercyclohexanyl, binaphthyl, binorbornyl, phenyl-terphenyl, 1,1-diphenylmethano, 1,1-dinaphthyletheno, acridarsinyl, acridinyl, acridophosphinyl, 1*H*-acrindolinyl, anthrazinyl, anthyridinyl, arsanthridinyl, arsinolyl, arsinoliziny, arsinoliziny, arsinoliziny, benzofuranyl, carbazolyl, β -carbolinyl, chromenyl, thiochromenyl, cinnolinyl, furanyl, imidazolyl, indazolyl, indolyl, indoliziny, isoarsindolyl, isoarsinolinyl, isobenzofuranyl, isochromenyl, isothiochromenyl, isoindolyl, isophosphindolyl, isophosphinolinyl, isoquinolinyl, isothiazolyl, isoxazolyl, naphthyridinyl, oxazolyl, perimidinyl,

phenanthrazinyl, phenanthridinyl, phenanthrolinyl, phenazinyl, phosphanthridinyl, phosphindolyl, phosphindoliziny, phosphinoliziny, phthalazinyl, pteridinyl, phthaloperinyl, purinyl, pyranyl, thiopyranal, pyrazinyl, pyrazolyl, pyridazinyl, pyridinyl, pyrindinyl, pyrimidinyl, pyrrolyl, pyrroliziny, quinazolinyl, quindolinyl, 1*H*-quinindolinyl, quinolinyl, quinoliziny, quinoxalinyl, selenophenyl, thebenidinyl, thiazolyl, thiophenyl, triphenodioxazinyl, triphenodithiazinyl, xanthenyl, chromanyl, thiochromanyl, imidazolidinyl, indolinyl, isochromanyl, isothiochromanyl, isoindolinyl, morpholinyl, piperazinyl, piperidinyl, pyroolidinyl, pyrrolidinyl, quinuclidinyl, dimethylacridarsinyl, dimethylacridinyl, dimethylacridophosphinyl, dimethyl-1*H*-acridolinyl, dimethylanthrazinyl, dimethylanthryridinyl, dimethylarsanthridinyl, dimethylarsindolyl, dimethylarsindoliziny, dimethylarsinolinyl, dimethylarsinoliziny, dibutylbenzofuranyl, dibutylcarbazolyl, dibutyl- β -carbolinyl, dibutylchromenyl, dibutylthiochromenyl, butylcinnolinyl, dibutylfuranyl, dimethylimidazolyl, dimethylindazolyl, dipropylindolyl, dipropylindoliziny, dimethylisoarsindolyl, methylisoarsinolinyl, dimethylisobenzofuranyl, diphenylisochromenyl, dibutylisothiochromenyl, phenylisoindolyl, butylisophosphindolyl, dibutylisophosphinolyl, dimethylisoquinolinyl, methylisothiazolyl, butylisoxazolyl, butyl-naphthyridinyl, dimethyloxazolyl, methylphenylperimidinyl, tetrabutylphenanthrazinyl, propylphenanthridinyl, dibutylphenanthrolinyl, tetramethylphenazinyl, butylphosphanthridinyl, phenylphosphindolyl, dimethylphosphindoliziny, methylphosphinoliziny, dibutylphthalazinyl, trimethylpteridinyl, methylphthaloperinyl, dimethylpurinyl, dibutylpyranyl, dibutylthiopyranal, trimethylpyrazinyl, phenylpyrazolyl, dipropylpyridazinyl, dimethylpyridinyl, methylpropylpyrindinyl, triethylpyrimidinyl, dibutylpyrrolyl, diethylpyrroliziny, dibutylquinazolinyl, dibutylquindolinyl, dibutyl-1*H*-quinindolinyl, dimethylquinolinyl, propylquinoliziny, methylquinoxalinyl, methylbutylselenophenyl, methylthebenidinyl, dimethylthiazolyl, trimethylthiophenyl, dibutyltriphenodioxazinyl, dibutyltriphenodithiazinyl, dibutylxanthenyl, trimethylchromanyl, dimethylthiochromanyl, dimethylimidazolidinyl, dimethylindolinyl, dibutylisochromanyl,

dibutylisothiochromanyl, phenylisindoliny, dibutylmorpholiny, dimethylpiperaziny, dimethylpiperidiny, dimethylpyrrolidiny, dimethylpyrrolidiny, bipyridyl, pyrido[2,1,6-*de*]quinoliziny, hexamethylquinuclidiny, 5,7-dioxa-6-phosphadibenzo[*a,c*]cycloheptene-6-oxide, 9-oxa-10-phosphaphenanthrene-10-oxide, methoxy, ethoxy, propoxy, butoxy, pentoxy, phenoxy, dimethylphenoxy, dimethylamino, diethylamino, dipropylamino, methylethylamino, methylpropylamino, ethylpropylamino, diphenylamino, methylphenylamino, and ethylphenylamino.

13. The compound of claim 11 where at least one R¹¹ and/or at least one R¹² are independently methyl, ethyl, *n*-propyl, *iso*-propyl, *n*-butyl, *sec*-butyl, *iso*-butyl, *tert*-butyl, phenyl, naphthyl, diphenylmethyl, or trifluoromethyl.
14. The compound of claim any of the above claims wherein X is represented by the formulae:



where each O is bonded to M, and where R^a, R^b, R^c and R^d are, independently, selected from the group consisting of hydrogen, methyl, ethyl, ethenyl, ethynyl, and all isomers of propyl, butyl, pentyl, hexyl, heptyl, octyl, nonyl, decyl, undecyl, dodecyl, tridecyl, tetradecyl, pentadecyl, hexadecyl, heptadecyl, octadecyl, nonadecyl, eicosyl, heneicosyl, docosyl, tricosyl, tetracosyl, pentacosyl, hexacosyl, heptacosyl, octacosyl, nonacosyl, triacontyl, propenyl, butenyl, pentenyl, hexenyl, heptenyl, octenyl, nonenyl, decenyl, undecenyl, dodecenyl, tridecenyl, tetradecenyl, pentadecenyl, hexadecenyl, heptadecenyl, octadecenyl, nonadecenyl, eicosenyl, heneicosenyl, docosenyl, tricosenyl, tetracosenyl, pentacosenyl, hexacosenyl, heptacosenyl, octacosenyl, nonacosenyl, triacontenyl, propynyl, butynyl, pentynyl, hexynyl, heptynyl, octynyl, nonynyl, decynyl, undecynyl, dodecynyl, tridecynyl,

tetradecynyl, pentadecynyl, hexadecynyl, heptadecynyl, octadecynyl, nonadecynyl, eicosynyl, heneicosynyl, docosynyl, tricosynyl, tetracosynyl, pentacosynyl, hexacosynyl, heptacosynyl, octacosynyl, nonacosynyl, and triacontynyl, phenyl, naphthyl, anthracenyl, pyrenyl, biphenyl, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl, cyclooctyl, cyclononyl, cyclodecyl, cycloundecyl, cyclododecyl, fluoro, chloro, bromo, iodo, trimethylsilyl, triethylsilyl, tripropylsilyl, dimethylethylsilyl, diethylmethylsilyl, trimethoxysilyl, tirethoxysilyl, tripropoxysilyl, methoxy, ethoxy, propoxy, butoxy, phenoxy, or a nitro, carboxylic acid, ester, ketone (excluding 1,2-diketones) or aldehyde group; and optionally, R^a, R^b, R^c or R^d can connect to form substituted or unsubstituted, saturated, partially unsaturated or aromatic ring structures.

15. The compound of claim 1 where the transition metal compound is [1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butylcatecholate],
[1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-chlorocatecholate],
[1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],
[1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-fluorocatecholate],
[1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-difluorocatecholate],
[1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-methoxycatecholate],
[1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],
[1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-*iso*-propylcatecholate],
[1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-cyclohexylcatecholate],
[1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butylcatecholate],

[1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butyl-6-chlorocatecholate],

[1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butyl-6-nitrocatecholate],

[1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,4,6-tri-*iso*-propylcatecholate],

[1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*iso*-propylcatecholate],

[1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-dimethylcatecholate],

[1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,8-tetra-*tert*-butyldibenzo[1,4]dioxine-2,3-diolate],

[1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,7,8,9-hexachlorodibenzo[1,4]dioxine-2,3-diolate],

[1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,7,8,9-hexabromodibenzo[1,4]dioxine-2,3-diolate],

[2,3-dimethyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butylcatecholate],

[2,3-dimethyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-chlorocatecholate],

[2,3-dimethyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

[2,3-dimethyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-fluorocatecholate],

[2,3-dimethyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-difluorocatecholate],

[2,3-dimethyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-methoxycatecholate],

[2,3-dimethyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

[2,3-dimethyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-*iso*-propylcatecholate],

[2,3-dimethyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-cyclohexylcatecholate],

[2,3-dimethyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butylcatecholate],

[2,3-dimethyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butyl-6-chlorocatecholate],

[2,3-dimethyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butyl-6-nitrocatecholate],

[2,3-dimethyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,4,6-tri-*iso*-propylcatecholate],

[2,3-dimethyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*iso*-propylcatecholate],

[2,3-dimethyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,8-tetra-*tert*-butyldibenzo[1,4]dioxine-2,3-diolate],

[2,3-dimethyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,7,8,9-hexachlorodibenzo[1,4]dioxine-2,3-diolate],

[2,3-dimethyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,7,8,9-hexabromodibenzo[1,4]dioxine-2,3-diolate],

[2-methyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butylcatecholate],

[2-methyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-chlorocatecholate],

[2-methyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

[2-methyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-fluorocatecholate],

[2-methyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-difluorocatecholate],

[2-methyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-methoxycatecholate],

[2-methyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

[2-methyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-*iso*-propylcatecholate],

[2-methyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-cyclohexylcatecholate],

[2-methyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butylcatecholate],
[2-methyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butyl-6-chlorocatecholate],
[2-methyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butyl-6-nitrocatecholate],
[2-methyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,4,6-tri-*iso*-propylcatecholate],
[2-methyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*iso*-propylcatecholate],
[2-methyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,8-tetra-*tert*-butyldibenzo[1,4]dioxine-2,3-diolate],
[2-methyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,7,8,9-hexachlorodibenzo[1,4]dioxine-2,3-diolate],
[2-methyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,7,8,9-hexabromodibenzo[1,4]dioxine-2,3-diolate],
[2-methyl-3-propyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butylcatecholate],
[2-methyl-3-propyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-chlorocatecholate],
[2-methyl-3-propyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],
[2-methyl-3-propyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-fluorocatecholate],
[2-methyl-3-propyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-difluorocatecholate],
[2-methyl-3-propyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-methoxycatecholate],
[2-methyl-3-propyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],
[2-methyl-3-propyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-*iso*-propylcatecholate],
[2-methyl-3-propyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-cyclohexylcatecholate],

[2-methyl-3-propyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene]
nickel(II) [3,5-di-*tert*-butylcatecholate],
[2-methyl-3-propyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene]
nickel(II) [3,5-di-*tert*-butyl-6-chlorocatecholate],
[2-methyl-3-propyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene]
nickel(II) [3,5-di-*tert*-butyl-6-nitrocatecholate],
[2-methyl-3-propyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene]
nickel(II) [3,4,6-tri-*iso*-propylcatecholate],
[2-methyl-3-propyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene]
nickel(II) [3,6-di-*iso*-propylcatecholate],
[2-methyl-3-propyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene]
nickel(II) [1,4,6,8-tetra-*tert*-butyldibenzo[1,4]dioxine-2,3-diolate],
[2-methyl-3-propyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene]
nickel(II) [1,4,6,7,8,9-hexachlorodibenzo[1,4]dioxine-2,3-diolate],
[2-methyl-3-propyl-1,4-bis-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene]
nickel(II) [1,4,6,7,8,9-hexabromodibenzo[1,4]dioxine-2,3-diolate],
[1,2-bis-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-
butylcatecholate],
[1,2-bis-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-4-
chlorocatecholate],
[1,2-bis-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-
4,5-dichlorocatecholate],
[1,2-bis-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-4-
fluorocatecholate],
[1,2-bis-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-
4,5-difluorocatecholate],
[1,2-bis-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-4-
methoxycatecholate],
[1,2-bis-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-
4,5-dimethoxycatecholate],
[1,2-bis-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-4-
iso-propylcatecholate],
[1,2-bis-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-4-
cyclohexylcatecholate],

[1,2-bis-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,5-di-*tert*-butylcatecholate],

[1,2-bis-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,5-di-*tert*-butyl-6-chlorocatecholate],

[1,2-bis-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,5-di-*tert*-butyl-6-nitrocatecholate],

[1,2-bis-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,4,6-tri-*iso*-propylcatecholate],

[1,2-bis-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,6-di-*iso*-propylcatecholate],

[1,2-bis-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [1,4,6,8-tetra-*tert*-butyldibenzo[1,4]dioxine-2,3-diolate],

[1,2-bis-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [1,4,6,7,8,9-hexachlorodibenzo[1,4]dioxine-2,3-diolate],

[1,2-bis-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [1,4,6,7,8,9-hexabromodibenzo[1,4]dioxine-2,3-diolate],

[1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butylcatecholate],

[1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-chlorocatecholate],

[1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

[1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-fluorocatecholate],

[1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-difluorocatecholate],

[1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-methoxycatecholate],

[1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

[1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-*iso*-propylcatecholate],

[1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-cyclohexylcatecholate],

[1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butylcatecholate],

[1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butyl-6-chlorocatecholate],

[1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butyl-6-nitrocatecholate],

[1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,4,6-tri-*iso*-propylcatecholate],

[1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*iso*-propylcatecholate],

[1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-dimethylcatecholate],

[1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,8-tetra-*tert*-butyldibenzo[1,4]dioxine-2,3-diolate],

[1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,7,8,9-hexachlorodibenzo[1,4]dioxine-2,3-diolate],

[1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,7,8,9-hexabromodibenzo[1,4]dioxine-2,3-diolate],

[2,3-dimethyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butylcatecholate],

[2,3-dimethyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-chlorocatecholate],

[2,3-dimethyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

[2,3-dimethyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-fluorocatecholate],

[2,3-dimethyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-difluorocatecholate],

[2,3-dimethyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-methoxycatecholate],

[2,3-dimethyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

[2,3-dimethyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-*iso*-propylcatecholate],

[2,3-dimethyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-cyclohexylcatecholate],

[2,3-dimethyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butylcatecholate],

[2,3-dimethyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butyl-6-chlorocatecholate],

[2,3-dimethyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butyl-6-nitrocatecholate],

[2,3-dimethyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,4,6-tri-*iso*-propylcatecholate],

[2,3-dimethyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*iso*-propylcatecholate],

[2,3-dimethyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II)

[1,4,6,8-tetra-*tert*-butyldibenzo[1,4]dioxine-2,3-diolate],

[2,3-dimethyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II)

[1,4,6,7,8,9-hexachlorodibenzo[1,4]dioxine-2,3-diolate],

[2,3-dimethyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II)

[1,4,6,7,8,9-hexabromodibenzo[1,4]dioxine-2,3-diolate],

[2-methyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butylcatecholate],

[2-methyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-chlorocatecholate],

[2-methyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

[2-methyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-fluorocatecholate],

[2-methyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-difluorocatecholate],

[2-methyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-methoxycatecholate],

[2-methyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

[2-methyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-*iso*-propylcatecholate],

[2-methyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-cyclohexylcatecholate],

[2-methyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butylcatecholate],

[2-methyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butyl-6-chlorocatecholate],

[2-methyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butyl-6-nitrocatecholate],

[2-methyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,4,6-tri-*iso*-propylcatecholate],

[2-methyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*iso*-propylcatecholate],

[2-methyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,8-tetra-*tert*-butyldibenzo[1,4]dioxine-2,3-diolate],

[2-methyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,7,8,9-hexachlorodibenzo[1,4]dioxine-2,3-diolate],

[2-methyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,7,8,9-hexabromodibenzo[1,4]dioxine-2,3-diolate],

[2-methyl-3-propyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butylcatecholate],

[2-methyl-3-propyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-chlorocatecholate],

[2-methyl-3-propyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

[2-methyl-3-propyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-fluorocatecholate],

[2-methyl-3-propyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-difluorocatecholate],

[2-methyl-3-propyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-methoxycatecholate],

[2-methyl-3-propyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

[2-methyl-3-propyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-*iso*-propylcatecholate],

[2-methyl-3-propyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II)
[3,6-di-*tert*-butyl-4-cyclohexylcatecholate],
[2-methyl-3-propyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II)
[3,5-di-*tert*-butylcatecholate],
[2-methyl-3-propyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II)
[3,5-di-*tert*-butyl-6-chlorocatecholate],
[2-methyl-3-propyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II)
[3,5-di-*tert*-butyl-6-nitrocatecholate],
[2-methyl-3-propyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II)
[3,4,6-tri-*iso*-propylcatecholate],
[2-methyl-3-propyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II)
[3,6-di-*iso*-propylcatecholate],
[2-methyl-3-propyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II)
[1,4,6,8-tetra-*tert*-butyldibenzo[1,4]dioxine-2,3-diolate],
[2-methyl-3-propyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II)
[1,4,6,7,8,9-hexachlorodibenzo[1,4]dioxine-2,3-diolate],
[2-methyl-3-propyl-1,4-bis-(2,6-dimethylphenyl)-1,4-diaza-1,3-butadiene] nickel(II)
[1,4,6,7,8,9-hexabromodibenzo[1,4]dioxine-2,3-diolate],
[1,2-bis-(2,6-dimethylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-
butylcatecholate],
[1,2-bis-(2,6-dimethylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-4-
chlorocatecholate],
[1,2-bis-(2,6-dimethylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-4,5-
dichlorocatecholate],
[1,2-bis-(2,6-dimethylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-4-
fluorocatecholate],
[1,2-bis-(2,6-dimethylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-4,5-
difluorocatecholate],
[1,2-bis-(2,6-dimethylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-4-
methoxycatecholate],
[1,2-bis-(2,6-dimethylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-4,5-
dimethoxycatecholate],
[1,2-bis-(2,6-dimethylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-4-*iso*-
propylcatecholate],

[1,2-bis-(2,6-dimethylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-4-cyclohexylcatecholate],

[1,2-bis-(2,6-dimethylphenylimino)acenaphthene] nickel(II) [3,5-di-*tert*-butylcatecholate],

[1,2-bis-(2,6-dimethylphenylimino)acenaphthene] nickel(II) [3,5-di-*tert*-butyl-6-chlorocatecholate],

[1,2-bis-(2,6-dimethylphenylimino)acenaphthene] nickel(II) [3,5-di-*tert*-butyl-6-nitrocatecholate],

[1,2-bis-(2,6-dimethylphenylimino)acenaphthene] nickel(II) [3,4,6-tri-*iso*-propylcatecholate],

[1,2-bis-(2,6-dimethylphenylimino)acenaphthene] nickel(II) [3,6-di-*iso*-propylcatecholate],

[1,2-bis-(2,6-dimethylphenylimino)acenaphthene] nickel(II) [1,4,6,8-tetra-*tert*-butyldibenzo[1,4]dioxine-2,3-diolate],

[1,2-bis-(2,6-dimethylphenylimino)acenaphthene] nickel(II) [1,4,6,7,8,9-hexachlorodibenzo[1,4]dioxine-2,3-diolate],

[1,2-bis-(2,6-dimethylphenylimino)acenaphthene] nickel(II) [1,4,6,7,8,9-hexabromodibenzo[1,4]dioxine-2,3-diolate],

[1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butylcatecholate],

[1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-chlorocatecholate],

[1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

[1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-fluorocatecholate],

[1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-difluorocatecholate],

[1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-methoxycatecholate],

[1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

[1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-*iso*-propylcatecholate],

[1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-cyclohexylcatecholate],

[1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butylcatecholate],

[1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butyl-6-chlorocatecholate],

[1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butyl-6-nitrocatecholate],

[1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,4,6-tri-*iso*-propylcatecholate],

[1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*iso*-propylcatecholate],

[1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-dimethylcatecholate],

[1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,8-tetra-*tert*-butyldibenzo[1,4]dioxine-2,3-diolate],

[1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,7,8,9-hexachlorodibenzo[1,4]dioxine-2,3-diolate],

[1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,7,8,9-hexabromodibenzo[1,4]dioxine-2,3-diolate],

[2,3-dimethyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butylcatecholate],

[2,3-dimethyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-chlorocatecholate],

[2,3-dimethyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

[2,3-dimethyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-fluorocatecholate],

[2,3-dimethyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-difluorocatecholate],

[2,3-dimethyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-methoxycatecholate],

[2,3-dimethyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

[2,3-dimethyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-*iso*-propylcatecholate],

[2,3-dimethyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-cyclohexylcatecholate],

[2,3-dimethyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butylcatecholate],

[2,3-dimethyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butyl-6-chlorocatecholate],

[2,3-dimethyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butyl-6-nitrocatecholate],

[2,3-dimethyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,4,6-tri-*iso*-propylcatecholate],

[2,3-dimethyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*iso*-propylcatecholate],

[2,3-dimethyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,8-tetra-*tert*-butyldibenzo[1,4]dioxine-2,3-diolate],

[2,3-dimethyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,7,8,9-hexachlorodibenzo[1,4]dioxine-2,3-diolate],

[2,3-dimethyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,7,8,9-hexabromodibenzo[1,4]dioxine-2,3-diolate],

[2-methyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butylcatecholate],

[2-methyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-chlorocatecholate],

[2-methyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

[2-methyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-fluorocatecholate],

[2-methyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-difluorocatecholate],

[2-methyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-methoxycatecholate],

[2-methyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

[2-methyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-*iso*-propylcatecholate],

[2-methyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-cyclohexylcatecholate],

[2-methyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butylcatecholate],

[2-methyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butyl-6-chlorocatecholate],

[2-methyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butyl-6-nitrocatecholate],

[2-methyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,4,6-tri-*iso*-propylcatecholate],

[2-methyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*iso*-propylcatecholate],

[2-methyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,8-tetra-*tert*-butyldibenzo[1,4]dioxine-2,3-diolate],

[2-methyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,7,8,9-hexachlorodibenzo[1,4]dioxine-2,3-diolate],

[2-methyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,7,8,9-hexabromodibenzo[1,4]dioxine-2,3-diolate],

[2-methyl-3-propyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butylcatecholate],

[2-methyl-3-propyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-chlorocatecholate],

[2-methyl-3-propyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

[2-methyl-3-propyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-fluorocatecholate],

[2-methyl-3-propyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-difluorocatecholate],

[2-methyl-3-propyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-methoxycatecholate],

[2-methyl-3-propyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

[2-methyl-3-propyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-*iso*-propylcatecholate],
[2-methyl-3-propyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-cyclohexylcatecholate],
[2-methyl-3-propyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butylcatecholate],
[2-methyl-3-propyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butyl-6-chlorocatecholate],
[2-methyl-3-propyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butyl-6-nitrocatecholate],
[2-methyl-3-propyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,4,6-tri-*iso*-propylcatecholate],
[2-methyl-3-propyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*iso*-propylcatecholate],
[2-methyl-3-propyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,8-tetra-*tert*-butyldibenzo[1,4]dioxine-2,3-diolate],
[2-methyl-3-propyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,7,8,9-hexachlorodibenzo[1,4]dioxine-2,3-diolate],
[2-methyl-3-propyl-1-(2,6-dimethylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,7,8,9-hexabromodibenzo[1,4]dioxine-2,3-diolate],
[1-(2,6-dimethylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butylcatecholate],
[1-(2,6-dimethylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-4-chlorocatecholate],
[1-(2,6-dimethylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],
[1-(2,6-dimethylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-4-fluorocatecholate],
[1-(2,6-dimethylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-4,5-difluorocatecholate],
[1-(2,6-dimethylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-4-methoxycatecholate],
[1-(2,6-dimethylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

[1-(2,6-dimethylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene]
nickel(II) [3,6-di-*tert*-butyl-4-*iso*-propylcatecholate],

[1-(2,6-dimethylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene]
nickel(II) [3,6-di-*tert*-butyl-4-cyclohexylcatecholate],

[1-(2,6-dimethylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene]
nickel(II) [3,5-di-*tert*-butylcatecholate],

[1-(2,6-dimethylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene]
nickel(II) [3,5-di-*tert*-butyl-6-chlorocatecholate],

[1-(2,6-dimethylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene]
nickel(II) [3,5-di-*tert*-butyl-6-nitrocatecholate],

[1-(2,6-dimethylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene]
nickel(II) [3,4,6-tri-*iso*-propylcatecholate],

[1-(2,6-dimethylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene]
nickel(II) [3,6-di-*iso*-propylcatecholate],

[1-(2,6-dimethylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene]
nickel(II) [1,4,6,8-tetra-*tert*-butyldibenzo[1,4]dioxine-2,3-diolate],

[1-(2,6-dimethylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene]
nickel(II) [1,4,6,7,8,9-hexachlorodibenzo[1,4]dioxine-2,3-diolate],

[1-(2,6-dimethylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene]
nickel(II) [1,4,6,7,8,9-hexabromodibenzo[1,4]dioxine-2,3-diolate],

[1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene]
nickel(II) [3,6-di-*tert*-butylcatecholate],

[1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene]
nickel(II) [3,6-di-*tert*-butyl-4-chlorocatecholate],

[1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene]
nickel(II) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

[1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene]
nickel(II) [3,6-di-*tert*-butyl-4-fluorocatecholate],

[1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene]
nickel(II) [3,6-di-*tert*-butyl-4,5-difluorocatecholate],

[1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene]
nickel(II) [3,6-di-*tert*-butyl-4-methoxycatecholate],

[1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene]
nickel(II) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

[1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene]
nickel(II) [3,6-di-*tert*-butyl-4-*iso*-propylcatecholate],
[1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene]
nickel(II) [3,6-di-*tert*-butyl-4-cyclohexylcatecholate],
[1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene]
nickel(II) [3,5-di-*tert*-butylcatecholate],
[1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene]
nickel(II) [3,5-di-*tert*-butyl-6-chlorocatecholate],
[1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene]
nickel(II) [3,5-di-*tert*-butyl-6-nitrocatecholate],
[1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene]
nickel(II) [3,4,6-tri-*iso*-propylcatecholate],
[1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene]
nickel(II) [3,6-di-*iso*-propylcatecholate],
[1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene]
nickel(II) [3,5-dimethylcatecholate],
[1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene]
nickel(II) [1,4,6,8-tetra-*tert*-butyldibenzo[1,4]dioxine-2,3-diolate],
[1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene]
nickel(II) [1,4,6,7,8,9-hexachlorodibenzo[1,4]dioxine-2,3-diolate],
[1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene]
nickel(II) [1,4,6,7,8,9-hexabromodibenzo[1,4]dioxine-2,3-diolate],
[2,3-dimethyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-
butadiene] nickel(II) [3,6-di-*tert*-butylcatecholate],
[2,3-dimethyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-
butadiene] nickel(II) [3,6-di-*tert*-butyl-4-chlorocatecholate],
[2,3-dimethyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-
butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],
[2,3-dimethyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-
butadiene] nickel(II) [3,6-di-*tert*-butyl-4-bromocatecholate],
[2,3-dimethyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-
butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dibromocatecholate],
[2,3-dimethyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-
butadiene] nickel(II) [3,6-di-*tert*-butyl-4-fluorocatecholate],

[2,3-dimethyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-difluorocatecholate],

[2,3-dimethyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-methoxycatecholate],

[2,3-dimethyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

[2,3-dimethyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-*iso*-propylcatecholate],

[2,3-dimethyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-cyclohexylcatecholate],

[2,3-dimethyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butylcatecholate],

[2,3-dimethyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butyl-6-chlorocatecholate],

[2,3-dimethyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butyl-6-nitrocatecholate],

[2,3-dimethyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,4,6-tri-*iso*-propylcatecholate],

[2,3-dimethyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*iso*-propylcatecholate],

[2,3-dimethyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,8-tetra-*tert*-butyldibenzo[1,4]dioxine-2,3-diolate],

[2,3-dimethyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,7,8,9-hexachlorodibenzo[1,4]dioxine-2,3-diolate],

[2,3-dimethyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,7,8,9-hexabromodibenzo[1,4]dioxine-2,3-diolate],

[2-methyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butylcatecholate],

[2-methyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-chlorocatecholate],

[2-methyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

[2-methyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-fluorocatecholate],

[2-methyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-difluorocatecholate],

[2-methyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-methoxycatecholate],

[2-methyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

[2-methyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-*iso*-propylcatecholate],

[2-methyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-cyclohexylcatecholate],

[2-methyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butylcatecholate],

[2-methyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butyl-6-chlorocatecholate],

[2-methyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butyl-6-nitrocatecholate],

[2-methyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,4,6-tri-*iso*-propylcatecholate],

[2-methyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*iso*-propylcatecholate],

[2-methyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,8-tetra-*tert*-butyldibenzo[1,4]dioxine-2,3-diolate],

[2-methyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,7,8,9-hexachlorodibenzo[1,4]dioxine-2,3-diolate],

[2-methyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,7,8,9-hexabromodibenzo[1,4]dioxine-2,3-diolate],

[2-methyl-3-propyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butylcatecholate],

[2-methyl-3-propyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-chlorocatecholate],

[2-methyl-3-propyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

[2-methyl-3-propyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-fluorocatecholate],

[2-methyl-3-propyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-difluorocatecholate],

[2-methyl-3-propyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-methoxycatecholate],

[2-methyl-3-propyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

[2-methyl-3-propyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-*iso*-propylcatecholate],

[2-methyl-3-propyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*tert*-butyl-4-cyclohexylcatecholate],

[2-methyl-3-propyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butylcatecholate],

[2-methyl-3-propyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butyl-6-chlorocatecholate],

[2-methyl-3-propyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,5-di-*tert*-butyl-6-nitrocatecholate],

[2-methyl-3-propyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,4,6-tri-*iso*-propylcatecholate],

[2-methyl-3-propyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [3,6-di-*iso*-propylcatecholate],

[2-methyl-3-propyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,8-tetra-*tert*-butyldibenzo[1,4]dioxine-2,3-diolate],

[2-methyl-3-propyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,7,8,9-hexachlorodibenzo[1,4]dioxine-2,3-diolate],

[2-methyl-3-propyl-1-(2,5-di-*tert*-butylphenyl)-4-(2,6-di-*iso*-propylphenyl)-1,4-diaza-1,3-butadiene] nickel(II) [1,4,6,7,8,9-hexabromodibenzo[1,4]dioxine-2,3-diolate],

[1-(2,5-di-*tert*-butylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butylcatecholate],

[1-(2,5-di-*tert*-butylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-4-chlorocatecholate],

[1-(2,5-di-*tert*-butylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

[1-(2,5-di-*tert*-butylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-4-fluorocatecholate],

[1-(2,5-di-*tert*-butylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-4,5-difluorocatecholate],

[1-(2,5-di-*tert*-butylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-4-methoxycatecholate],

[1-(2,5-di-*tert*-butylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

[1-(2,5-di-*tert*-butylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-4-*iso*-propylcatecholate],

[1-(2,5-di-*tert*-butylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,6-di-*tert*-butyl-4-cyclohexylcatecholate],

[1-(2,5-di-*tert*-butylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,5-di-*tert*-butylcatecholate],

[1-(2,5-di-*tert*-butylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,5-di-*tert*-butyl-6-chlorocatecholate],

[1-(2,5-di-*tert*-butylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,5-di-*tert*-butyl-6-nitrocatecholate],

[1-(2,5-di-*tert*-butylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,4,6-tri-*iso*-propylcatecholate],

[1-(2,5-di-*tert*-butylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [3,6-di-*iso*-propylcatecholate],

[1-(2,5-di-*tert*-butylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [1,4,6,8-tetra-*tert*-butyldibenzo[1,4]dioxine-2,3-diolate],

[1-(2,5-di-*tert*-butylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [1,4,6,7,8,9-hexachlorodibenzo[1,4]dioxine-2,3-diolate],

[1-(2,5-di-*tert*-butylphenylimino)-2-(2,6-di-*iso*-propylphenylimino)acenaphthene] nickel(II) [1,4,6,7,8,9-hexabromodibenzo[1,4]dioxine-2,3-diolate],

[1,2-bis-(2,6-dimethylphenylimino)-cyclohexane] nickel(II) [3,6-di-*tert*-butylcatecholate],

[2,3-bis-(2,6-dimethylphenylimino)-[1,4]dithiane] nickel(II) [3,6-di-*tert*-butylcatecholate],

[2,3-bis-(2,6-dimethylphenylimino)-piperazine] nickel(II) [3,6-di-*tert*-butylcatecholate],

[1,4-dimethyl-2,3-bis-(2,6-dimethylphenylimino)-piperazine] nickel(II) [3,6-di-*tert*-butylcatecholate],

[2,3-bis-(2,6-dimethylphenylimino)-bicyclo[2.2.1]-heptane] nickel(II) [3,6-di-*tert*-butylcatecholate],
[1,4-dimethyl-2,3-bis-(2,6-dimethylphenylimino)-[1,4]diazepane] nickel(II) [3,6-di-*tert*-butylcatecholate],
[1-methyl-2,3-bis-(2,6-dimethylphenylimino)-cyclopentane] nickel(II) [3,6-di-*tert*-butylcatecholate],
[5-methyl-2,3-bis-(2,6-dimethylphenylimino)-tetrahydrofuran] nickel(II) [3,6-di-*tert*-butylcatecholate],
[5-methyl-2,3-bis-(2,6-dimethylphenylimino)-2,3-dihydrohydrofuran] nickel(II) [3,6-di-*tert*-butylcatecholate],
[1,2-bis-(2,6-di-*iso*-propylphenylimino)-cyclohexane] nickel(II) [3,6-di-*tert*-butylcatecholate],
[2,3-bis-(2,6-di-*iso*-propylphenylimino)-[1,4]dithiane] nickel(II) [3,6-di-*tert*-butylcatecholate],
[2,3-bis-(2,6-di-*iso*-propylphenylimino)-piperazine] nickel(II) [3,6-di-*tert*-butylcatecholate],
[1,4-dimethyl-2,3-bis-(2,6-di-*iso*-propylphenylimino)-piperazine] nickel(II) [3,6-di-*tert*-butylcatecholate],
[2,3-bis-(2,6-di-*iso*-propylphenylimino)-bicyclo[2.2.1]-heptane] nickel(II) [3,6-di-*tert*-butylcatecholate],
[1,4-dimethyl-2,3-bis-(2,6-di-*iso*-propylphenylimino)-[1,4]diazepane] nickel(II) [3,6-di-*tert*-butylcatecholate],
[1-methyl-2,3-bis-(2,6-di-*iso*-propylphenylimino)-cyclopentane] nickel(II) [3,6-di-*tert*-butylcatecholate],
[5-methyl-2,3-bis-(2,6-di-*iso*-propylphenylimino)-tetrahydrofuran] nickel(II) [3,6-di-*tert*-butylcatecholate],
[5-methyl-2,3-bis-(2,6-di-*iso*-propylphenylimino)-2,3-dihydrohydrofuran] nickel(II) [3,6-di-*tert*-butylcatecholate],
[1-(2,6-di-*iso*-propylphenylimino)-2-(2,6-dimethylphenylimino)-cyclohexane] nickel(II) [3,6-di-*tert*-butylcatecholate],
[2-(2,6-di-*iso*-propylphenylimino)-3-(2,6-dimethylphenylimino)-[1,4]dithiane] nickel(II) [3,6-di-*tert*-butylcatecholate],
[2-(2,6-di-*iso*-propylphenylimino)-3-(2,6-dimethylphenylimino)-piperazine] nickel(II) [3,6-di-*tert*-butylcatecholate],

[1,4-dimethyl-2-(2,6-di-*iso*-propylphenylimino)-3-(2,6-dimethylphenylimino)-piperazine] nickel(II) [3,6-di-*tert*-butylcatecholate],

[2-(2,6-di-*iso*-propylphenylimino)-3-(2,6-dimethylphenylimino)-bicyclo[2.2.1]-heptane] nickel(II) [3,6-di-*tert*-butylcatecholate],

[1,4-dimethyl-2-(2,6-di-*iso*-propylphenylimino)-3-(2,6-dimethylphenylimino)-[1,4]diazepane] nickel(II) [3,6-di-*tert*-butylcatecholate],

[1-methyl-2-(2,6-di-*iso*-propylphenylimino)-3-(2,6-dimethylphenylimino)-cyclopentane] nickel(II) [3,6-di-*tert*-butylcatecholate],

[5-methyl-2-(2,6-di-*iso*-propylphenylimino)-3-(2,6-dimethylphenylimino)-tetrahydrofuran] nickel(II) [3,6-di-*tert*-butylcatecholate],

[5-methyl-2-(2,6-di-*iso*-propylphenylimino)-3-(2,6-dimethylphenylimino)-2,3-dihydrohydrofuran] nickel(II) [3,6-di-*tert*-butylcatecholate],

[1-(2,6-di-*iso*-propylphenylimino)-2-(2,5-di-*tert*-butylphenylimino)-cyclohexane] nickel(II) [3,6-di-*tert*-butylcatecholate],

[2-(2,6-di-*iso*-propylphenylimino)-3-(2,5-di-*tert*-butylphenylimino)-[1,4]dithiane] nickel(II) [3,6-di-*tert*-butylcatecholate],

[2-(2,6-di-*iso*-propylphenylimino)-3-(2,5-di-*tert*-butylphenylimino)-piperazine] nickel(II) [3,6-di-*tert*-butylcatecholate],

[1,4-dimethyl-2-(2,6-di-*iso*-propylphenylimino)-3-(2,5-di-*tert*-butylphenylimino)-piperazine] nickel(II) [3,6-di-*tert*-butylcatecholate],

[2-(2,6-di-*iso*-propylphenylimino)-3-(2,5-di-*tert*-butylphenylimino)-bicyclo[2.2.1]-heptane] nickel(II) [3,6-di-*tert*-butylcatecholate],

[1,4-dimethyl-2-(2,6-di-*iso*-propylphenylimino)-3-(2,5-di-*tert*-butylphenylimino)-[1,4]diazepane] nickel(II) [3,6-di-*tert*-butylcatecholate],

[1-methyl-2-(2,6-di-*iso*-propylphenylimino)-3-(2,5-di-*tert*-butylphenylimino)-cyclopentane] nickel(II) [3,6-di-*tert*-butylcatecholate],

[5-methyl-2-(2,6-di-*iso*-propylphenylimino)-3-(2,5-di-*tert*-butylphenylimino)-tetrahydrofuran] nickel(II) [3,6-di-*tert*-butylcatecholate],

[5-methyl-2-(2,6-di-*iso*-propylphenylimino)-3-(2,5-di-*tert*-butylphenylimino)-2,3-dihydrohydrofuran] nickel(II) [3,6-di-*tert*-butylcatecholate],

[1,2-bis-(2,6-dimethylphenylimino)-cyclohexane] nickel(II) [3,5-di-*tert*-butylcatecholate],

[2,3-bis-(2,6-dimethylphenylimino)-[1,4]dithiane] nickel(II) [3,5-di-*tert*-butylcatecholate],

[2,3-bis-(2,6-dimethylphenylimino)-piperazine] nickel(II) [3,5-di-*tert*-butylcatecholate],
[1,4-dimethyl-2,3-bis-(2,6-dimethylphenylimino)-piperazine] nickel(II) [3,5-di-*tert*-butylcatecholate],
[2,3-bis-(2,6-dimethylphenylimino)-bicyclo[2.2.1]-heptane] nickel(II) [3,5-di-*tert*-butylcatecholate],
[1,4-dimethyl-2,3-bis-(2,6-dimethylphenylimino)-[1,4]diazepane] nickel(II) [3,5-di-*tert*-butylcatecholate],
[1-methyl-2,3-bis-(2,6-dimethylphenylimino)-cyclopentane] nickel(II) [3,5-di-*tert*-butylcatecholate],
[5-methyl-2,3-bis-(2,6-dimethylphenylimino)-tetrahydrofuran] nickel(II) [3,5-di-*tert*-butylcatecholate],
[5-methyl-2,3-bis-(2,6-dimethylphenylimino)-2,3-dihydrohydrofuran] nickel(II) [3,5-di-*tert*-butylcatecholate],
[1,2-bis-(2,6-di-*iso*-propylphenylimino)-cyclohexane] nickel(II) [3,5-di-*tert*-butylcatecholate],
[2,3-bis-(2,6-di-*iso*-propylphenylimino)-[1,4]dithiane] nickel(II) [3,5-di-*tert*-butylcatecholate],
[2,3-bis-(2,6-di-*iso*-propylphenylimino)-piperazine] nickel(II) [3,5-di-*tert*-butylcatecholate],
[1,4-dimethyl-2,3-bis-(2,6-di-*iso*-propylphenylimino)-piperazine] nickel(II) [3,5-di-*tert*-butylcatecholate],
[2,3-bis-(2,6-di-*iso*-propylphenylimino)-bicyclo[2.2.1]-heptane] nickel(II) [3,5-di-*tert*-butylcatecholate],
[1,4-dimethyl-2,3-bis-(2,6-di-*iso*-propylphenylimino)-[1,4]diazepane] nickel(II) [3,5-di-*tert*-butylcatecholate],
[1-methyl-2,3-bis-(2,6-di-*iso*-propylphenylimino)-cyclopentane] nickel(II) [3,5-di-*tert*-butylcatecholate],
[5-methyl-2,3-bis-(2,6-di-*iso*-propylphenylimino)-tetrahydrofuran] nickel(II) [3,5-di-*tert*-butylcatecholate],
[5-methyl-2,3-bis-(2,6-di-*iso*-propylphenylimino)-2,3-dihydrohydrofuran] nickel(II) [3,5-di-*tert*-butylcatecholate],
[1-(2,6-di-*iso*-propylphenylimino)-2-(2,6-dimethylphenylimino)-cyclohexane] nickel(II) [3,5-di-*tert*-butylcatecholate],

[2-(2,6-di-*iso*-propylphenylimino)-3-(2,6-dimethylphenylimino)-[1,4]dithiane] nickel(II) [3,5-di-*tert*-butylcatecholate],

[2-(2,6-di-*iso*-propylphenylimino)-3-(2,6-dimethylphenylimino)-piperazine] nickel(II) [3,5-di-*tert*-butylcatecholate],

[1,4-dimethyl-2-(2,6-di-*iso*-propylphenylimino)-3-(2,6-dimethylphenylimino)-piperazine] nickel(II) [3,5-di-*tert*-butylcatecholate],

[2-(2,6-di-*iso*-propylphenylimino)-3-(2,6-dimethylphenylimino)-bicyclo[2.2.1]-heptane] nickel(II) [3,5-di-*tert*-butylcatecholate],

[1,4-dimethyl-2-(2,6-di-*iso*-propylphenylimino)-3-(2,6-dimethylphenylimino)-[1,4]diazepane] nickel(II) [3,5-di-*tert*-butylcatecholate],

[1-methyl-2-(2,6-di-*iso*-propylphenylimino)-3-(2,6-dimethylphenylimino)-cyclopentane] nickel(II) [3,5-di-*tert*-butylcatecholate],

[5-methyl-2-(2,6-di-*iso*-propylphenylimino)-3-(2,6-dimethylphenylimino)-tetrahydrofuran] nickel(II) [3,5-di-*tert*-butylcatecholate],

[5-methyl-2-(2,6-di-*iso*-propylphenylimino)-3-(2,6-dimethylphenylimino)-2,3-dihydrohydrofuran] nickel(II) [3,5-di-*tert*-butylcatecholate],

[1-(2,6-di-*iso*-propylphenylimino)-2-(2,5-di-*tert*-butylphenylimino)-cyclohexane] nickel(II) [3,5-di-*tert*-butylcatecholate],

[2-(2,6-di-*iso*-propylphenylimino)-3-(2,5-di-*tert*-butylphenylimino)-[1,4]dithiane] nickel(II) [3,5-di-*tert*-butylcatecholate],

[2-(2,6-di-*iso*-propylphenylimino)-3-(2,5-di-*tert*-butylphenylimino)-piperazine] nickel(II) [3,5-di-*tert*-butylcatecholate],

[1,4-dimethyl-2-(2,6-di-*iso*-propylphenylimino)-3-(2,5-di-*tert*-butylphenylimino)-piperazine] nickel(II) [3,5-di-*tert*-butylcatecholate],

[2-(2,6-di-*iso*-propylphenylimino)-3-(2,5-di-*tert*-butylphenylimino)-bicyclo[2.2.1]-heptane] nickel(II) [3,5-di-*tert*-butylcatecholate],

[1,4-dimethyl-2-(2,6-di-*iso*-propylphenylimino)-3-(2,5-di-*tert*-butylphenylimino)-[1,4]diazepane] nickel(II) [3,5-di-*tert*-butylcatecholate],

[1-methyl-2-(2,6-di-*iso*-propylphenylimino)-3-(2,5-di-*tert*-butylphenylimino)-cyclopentane] nickel(II) [3,5-di-*tert*-butylcatecholate],

[5-methyl-2-(2,6-di-*iso*-propylphenylimino)-3-(2,5-di-*tert*-butylphenylimino)-tetrahydrofuran] nickel(II) [3,5-di-*tert*-butylcatecholate],

[5-methyl-2-(2,6-di-*iso*-propylphenylimino)-3-(2,5-di-*tert*-butylphenylimino)-2,3-dihydrohydrofuran] nickel(II) [3,5-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,4,6-trimethylbenzenamine] cobalt(I) [3,5-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2-methylbenzenamine] cobalt(I) [3,5-di-*tert*-butyl catecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,6-dimethylbenzenamine] cobalt(I) [3,5-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,4-dimethylbenzenamine] cobalt(I) [3,5-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,6-di-*iso*-propylbenzenamine] cobalt(I) [3,5-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,6-di-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,5-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,5-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2-*iso*-propyl-6-methylbenzenamine] cobalt(I) [3,5-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2-*iso*-propyl-benzenamine] cobalt(I) [3,5-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl-dimethylidene)bis[2,4,6-trimethylbenzenamine] cobalt(I) [3,5-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl-dimethylidene)bis[2-methylbenzenamine] cobalt(I) [3,5-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl-dimethylidene)bis[2,6-dimethylbenzenamine] cobalt(I) [3,5-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl-dimethylidene)bis[2,4-dimethylbenzenamine] cobalt(I) [3,5-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl-dimethylidene)bis[2,6-di-*iso*-propylbenzenamine] cobalt(I) [3,5-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl-dimethylidene)bis[2,6-di-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,5-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl-dimethylidene)bis[2-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,5-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl-dimethylidene)bis[2-*iso*-propyl-6-methylbenzenamine] cobalt(I) [3,5-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl dimethylidyne)bis[2-*iso*-propylbenzenamine] cobalt(I) [3,5-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[benzenamine] cobalt(I) [3,5-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[2,4,6-trimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[2-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl catecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[2,6-dimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[2,4-dimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[2,6-di-*iso*-propylbenzenamine] cobalt(I) [3,6-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[2,6-di-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[2-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[2-*iso*-propyl-6-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[2-*iso*-propyl-benzenamine] cobalt(I) [3,6-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl dimethylidyne)bis[2,4,6-trimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl dimethylidyne)bis[2-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl dimethylidyne)bis[2,6-dimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl dimethylidyne)bis[2,4-dimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl dimethylidyne)bis[2,6-di-*iso*-propylbenzenamine] cobalt(I) [3,6-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediyl dimethylidyne)bis[2,6-di-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediylldimethylidyne)bis[2-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediylldimethylidyne)bis[2-*iso*-propyl-6-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediylldimethylidyne)bis[2-*iso*-propylbenzenamine] cobalt(I) [3,6-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediylldiethylidyne)bis[benzenamine] cobalt(I) [3,6-di-*tert*-butylcatecholate],

N,N'-(2,6-pyridinediylldiethylidyne)bis[2,4,6-trimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-chlorocatecholate],

N,N'-(2,6-pyridinediylldiethylidyne)bis[2-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-chlorocatecholate],

N,N'-(2,6-pyridinediylldiethylidyne)bis[2,6-dimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-chlorocatecholate],

N,N'-(2,6-pyridinediylldiethylidyne)bis[2,4-dimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-chlorocatecholate],

N,N'-(2,6-pyridinediylldiethylidyne)bis[2,6-di-*iso*-propylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-chlorocatecholate],

N,N'-(2,6-pyridinediylldiethylidyne)bis[2,6-di-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-chlorocatecholate],

N,N'-(2,6-pyridinediylldiethylidyne)bis[2-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-chlorocatecholate],

N,N'-(2,6-pyridinediylldiethylidyne)bis[2-*iso*-propyl-6-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-chlorocatecholate],

N,N'-(2,6-pyridinediylldiethylidyne)bis[2-*iso*-propyl-benzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-chlorocatecholate],

N,N'-(2,6-pyridinediylldimethylidyne)bis[2,4,6-trimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-chlorocatecholate],

N,N'-(2,6-pyridinediylldimethylidyne)bis[2-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-chlorocatecholate],

N,N'-(2,6-pyridinediylldimethylidyne)bis[2,6-dimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-chlorocatecholate],

N,N'-(2,6-pyridinediylldimethylidyne)bis[2,4-dimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-chlorocatecholate],

N,N'-(2,6-pyridinediylldimethylidyne)bis[2,6-di-*iso*-propylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-chlorocatecholate],

N,N'-(2,6-pyridinediylldimethylidyne)bis[2,6-di-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-chlorocatecholate],

N,N'-(2,6-pyridinediylldimethylidyne)bis[2-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-chlorocatecholate],

N,N'-(2,6-pyridinediylldimethylidyne)bis[2-*iso*-propyl-6-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-chlorocatecholate],

N,N'-(2,6-pyridinediylldimethylidyne)bis[2-*iso*-propylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-chlorocatecholate],

N,N'-(2,6-pyridinediylldiethylidyne)bis[benzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-chlorocatecholate],

N,N'-(2,6-pyridinediylldiethylidyne)bis[2,4,6-trimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

N,N'-(2,6-pyridinediylldiethylidyne)bis[2-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

N,N'-(2,6-pyridinediylldiethylidyne)bis[2,6-dimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

N,N'-(2,6-pyridinediylldiethylidyne)bis[2,4-dimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

N,N'-(2,6-pyridinediylldiethylidyne)bis[2,6-di-*iso*-propylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

N,N'-(2,6-pyridinediylldiethylidyne)bis[2,6-di-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

N,N'-(2,6-pyridinediylldiethylidyne)bis[2-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

N,N'-(2,6-pyridinediylldiethylidyne)bis[2-*iso*-propyl-6-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

N,N'-(2,6-pyridinediylldiethylidyne)bis[2-*iso*-propyl-benzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

N,N'-(2,6-pyridinediylldimethylidyne)bis[2,4,6-trimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

N,N'-(2,6-pyridinediylldimethylidyne)bis[2-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

N,N'-(2,6-pyridinediyl dimethylidyne)bis[2,6-dimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

N,N'-(2,6-pyridinediyl dimethylidyne)bis[2,4-dimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

N,N'-(2,6-pyridinediyl dimethylidyne)bis[2,6-di-*iso*-propylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

N,N'-(2,6-pyridinediyl dimethylidyne)bis[2,6-di-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

N,N'-(2,6-pyridinediyl dimethylidyne)bis[2-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

N,N'-(2,6-pyridinediyl dimethylidyne)bis[2-*iso*-propyl-6-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

N,N'-(2,6-pyridinediyl dimethylidyne)bis[2-*iso*-propylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[benzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dichlorocatecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[2,4,6-trimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-methoxycatecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[2-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-methoxycatecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[2,6-dimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-methoxycatecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[2,4-dimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-methoxycatecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[2,6-di-*iso*-propylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-methoxycatecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[2,6-di-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-methoxycatecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[2-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-methoxycatecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[2-*iso*-propyl-6-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-methoxycatecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[2-*iso*-propylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-methoxycatecholate],

N,N'-(2,6-pyridinediyl dimethylidyne)bis[2,4,6-trimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-methoxycatecholate],

N,N'-(2,6-pyridinediyl dimethylidyne)bis[2-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-methoxycatecholate],

N,N'-(2,6-pyridinediyl dimethylidyne)bis[2,6-dimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-methoxycatecholate],

N,N'-(2,6-pyridinediyl dimethylidyne)bis[2,4-dimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-methoxycatecholate],

N,N'-(2,6-pyridinediyl dimethylidyne)bis[2,6-di-*iso*-propylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-methoxycatecholate],

N,N'-(2,6-pyridinediyl dimethylidyne)bis[2,6-di-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-methoxycatecholate],

N,N'-(2,6-pyridinediyl dimethylidyne)bis[2-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-methoxycatecholate],

N,N'-(2,6-pyridinediyl dimethylidyne)bis[2-*iso*-propyl-6-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-methoxycatecholate],

N,N'-(2,6-pyridinediyl dimethylidyne)bis[2-*iso*-propylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-methoxycatecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[benzenamine] cobalt(I) [3,6-di-*tert*-butyl-4-methoxycatecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[2,4,6-trimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[2-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[2,6-dimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[2,4-dimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[2,6-di-*iso*-propylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[2,6-di-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

N,N'-(2,6-pyridinediyl diethylidyne)bis[2-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2-*iso*-propyl-6-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2-*iso*-propyl-benzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

N,N'-(2,6-pyridinediyl-dimethylidene)bis[2,4,6-trimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

N,N'-(2,6-pyridinediyl-dimethylidene)bis[2-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

N,N'-(2,6-pyridinediyl-dimethylidene)bis[2,6-dimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

N,N'-(2,6-pyridinediyl-dimethylidene)bis[2,4-dimethylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

N,N'-(2,6-pyridinediyl-dimethylidene)bis[2,6-di-*iso*-propylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

N,N'-(2,6-pyridinediyl-dimethylidene)bis[2,6-di-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

N,N'-(2,6-pyridinediyl-dimethylidene)bis[2-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

N,N'-(2,6-pyridinediyl-dimethylidene)bis[2-*iso*-propyl-6-methylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

N,N'-(2,6-pyridinediyl-dimethylidene)bis[2-*iso*-propylbenzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[benzenamine] cobalt(I) [3,6-di-*tert*-butyl-4,5-dimethoxycatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,4,6-trimethylbenzenamine] cobalt(I) [4-*iso*-propylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2-methylbenzenamine] cobalt(I) [4-*iso*-propylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,6-dimethylbenzenamine] cobalt(I) [4-*iso*-propylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,4-dimethylbenzenamine] cobalt(I) [4-*iso*-propylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,6-di-*iso*-propylbenzenamine] cobalt(I) [4-*iso*-propylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,6-di-*iso*-propyl-4-methylbenzenamine] cobalt(I) [4-*iso*-propylcatecholate],
N,N'-(2,6-pyridinediyl-diethylidene)bis[2-*iso*-propyl-4-methylbenzenamine] cobalt(I) [4-*iso*-propylcatecholate],
N,N'-(2,6-pyridinediyl-diethylidene)bis[2-*iso*-propyl-6-methylbenzenamine] cobalt(I) [4-*iso*-propylcatecholate],
N,N'-(2,6-pyridinediyl-diethylidene)bis[2-*iso*-propyl-benzenamine] cobalt(I) [4-*iso*-propylcatecholate],
N,N'-(2,6-pyridinediyl-diethylidene)bis[2,4,6-trimethylbenzenamine] cobalt(I) [4,5-di-*iso*-propylcatecholate],
N,N'-(2,6-pyridinediyl-diethylidene)bis[2-methylbenzenamine] cobalt(I) [4,5-di-*iso*-propylcatecholate],
N,N'-(2,6-pyridinediyl-diethylidene)bis[2,6-dimethylbenzenamine] cobalt(I) [4,5-di-*iso*-propylcatecholate],
N,N'-(2,6-pyridinediyl-diethylidene)bis[2,4-dimethylbenzenamine] cobalt(I) [4,5-di-*iso*-propylcatecholate],
N,N'-(2,6-pyridinediyl-diethylidene)bis[2,6-di-*iso*-propylbenzenamine] cobalt(I) [4,5-di-*iso*-propylcatecholate],
N,N'-(2,6-pyridinediyl-diethylidene)bis[2,6-di-*iso*-propyl-4-methylbenzenamine] cobalt(I) [4,5-di-*iso*-propylcatecholate],
N,N'-(2,6-pyridinediyl-diethylidene)bis[2-*iso*-propyl-4-methylbenzenamine] cobalt(I) [4,5-di-*iso*-propylcatecholate],
N,N'-(2,6-pyridinediyl-diethylidene)bis[2-*iso*-propyl-6-methylbenzenamine] cobalt(I) [4,5-di-*iso*-propylcatecholate],
N,N'-(2,6-pyridinediyl-diethylidene)bis[2-*iso*-propyl-benzenamine] cobalt(I) [4,5-di-*iso*-propylcatecholate],
N,N'-(2,6-pyridinediyl-diethylidene)bis[2,4,6-trimethylbenzenamine] cobalt(I) [4-cyclohexylcatecholate],
N,N'-(2,6-pyridinediyl-diethylidene)bis[2-methylbenzenamine] cobalt(I) [4-cyclohexylcatecholate],
N,N'-(2,6-pyridinediyl-diethylidene)bis[2,6-dimethylbenzenamine] cobalt(I) [4-cyclohexylcatecholate],
N,N'-(2,6-pyridinediyl-diethylidene)bis[2,4-dimethylbenzenamine] cobalt(I) [4-cyclohexylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,6-di-*iso*-propylbenzenamine] cobalt(I) [4-cyclohexylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,6-di-*iso*-propyl-4-methylbenzenamine] cobalt(I) [4-cyclohexylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2-*iso*-propyl-4-methylbenzenamine] cobalt(I) [4-cyclohexylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2-*iso*-propyl-6-methylbenzenamine] cobalt(I) [4-cyclohexylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2-*iso*-propyl-benzenamine] cobalt(I) [4-cyclohexylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,4,6-trimethylbenzenamine] cobalt(I) [3,4,6-tri-*iso*-propylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2-methylbenzenamine] cobalt(I) [3,4,6-tri-*iso*-propylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,6-dimethylbenzenamine] cobalt(I) [3,4,6-tri-*iso*-propylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,4-dimethylbenzenamine] cobalt(I) [3,4,6-tri-*iso*-propylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,6-di-*iso*-propylbenzenamine] cobalt(I) [3,4,6-tri-*iso*-propylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,6-di-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,4,6-tri-*iso*-propylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,4,6-tri-*iso*-propylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2-*iso*-propyl-6-methylbenzenamine] cobalt(I) [3,4,6-tri-*iso*-propylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2-*iso*-propyl-benzenamine] cobalt(I) [3,4,6-tri-*iso*-propylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,4,6-trimethylbenzenamine] cobalt(I) [3,6-di-*iso*-propylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2-methylbenzenamine] cobalt(I) [3,6-di-*iso*-propylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,6-dimethylbenzenamine] cobalt(I) [3,6-di-*iso*-propylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,4-dimethylbenzenamine] cobalt(I) [3,6-di-*iso*-propylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,6-di-*iso*-propylbenzenamine] cobalt(I) [3,6-di-*iso*-propylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,6-di-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,6-di-*iso*-propylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2-*iso*-propyl-4-methylbenzenamine] cobalt(I) [3,6-di-*iso*-propylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2-*iso*-propyl-6-methylbenzenamine] cobalt(I) [3,6-di-*iso*-propylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2-*iso*-propyl-benzenamine] cobalt(I) [3,6-di-*iso*-propylcatecholate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,4,6-trimethylbenzenamine] cobalt(I) [naphthalene-2,3-diolate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2-methylbenzenamine] cobalt(I) [naphthalene-2,3-diolate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,6-dimethylbenzenamine] cobalt(I) [naphthalene-2,3-diolate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,4-dimethylbenzenamine] cobalt(I) [naphthalene-2,3-diolate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,6-di-*iso*-propylbenzenamine] cobalt(I) [naphthalene-2,3-diolate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,6-di-*iso*-propyl-4-methylbenzenamine] cobalt(I) [naphthalene-2,3-diolate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2-*iso*-propyl-4-methylbenzenamine] cobalt(I) [naphthalene-2,3-diolate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2-*iso*-propyl-6-methylbenzenamine] cobalt(I) [naphthalene-2,3-diolate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2-*iso*-propyl-benzenamine] cobalt(I) [naphthalene-2,3-diolate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,4,6-trimethylbenzenamine] cobalt(I) [phenanthrene-9,10-diolate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2-methylbenzenamine] cobalt(I) [phenanthrene-9,10-diolate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,6-dimethylbenzenamine] cobalt(I)
[phenanthrene-9,10-diolate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,4-dimethylbenzenamine] cobalt(I)
[phenanthrene-9,10-diolate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,6-di-*iso*-propylbenzenamine] cobalt(I)
[phenanthrene-9,10-diolate],

N,N'-(2,6-pyridinediyl-diethylidene)bis[2,6-di-*iso*-propyl-4-methylbenzenamine]
cobalt(I) [phenanthrene-9,10-diolate],

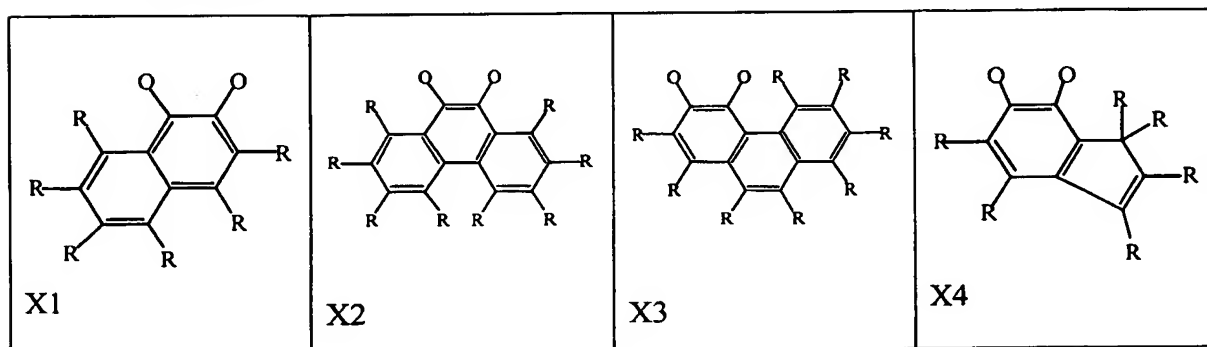
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[phenanthrene-9,10-diolate],

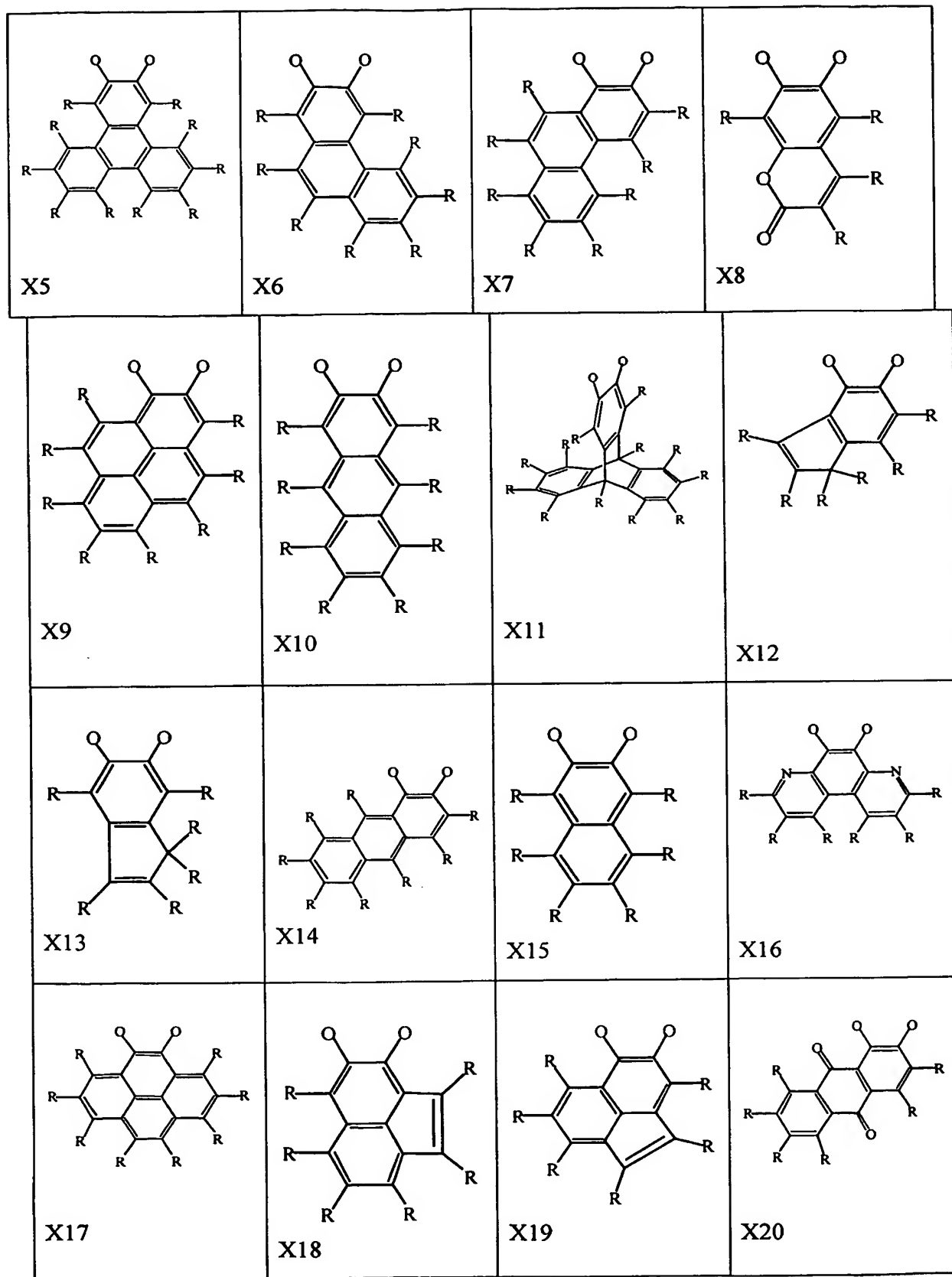
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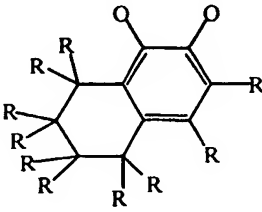
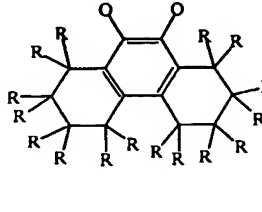
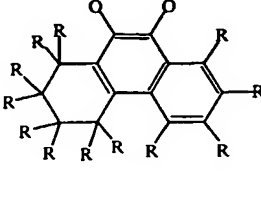
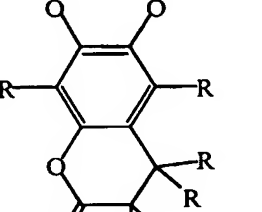
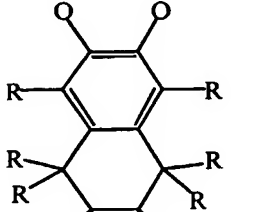
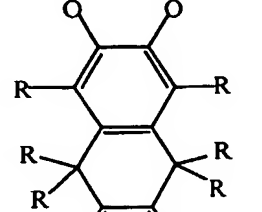
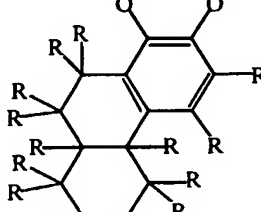
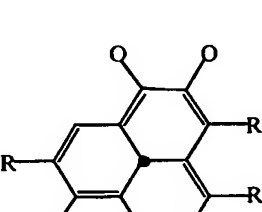
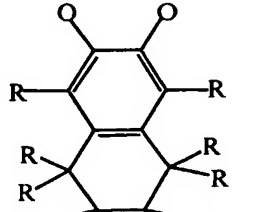
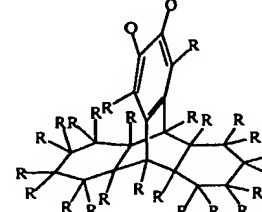
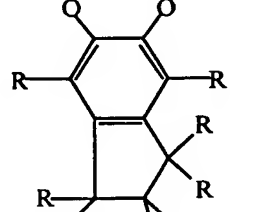
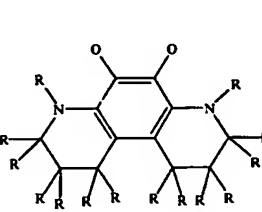
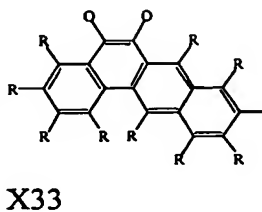
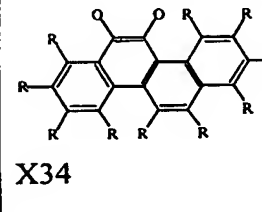
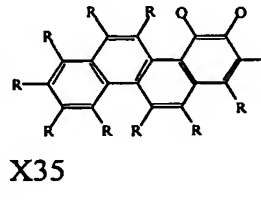
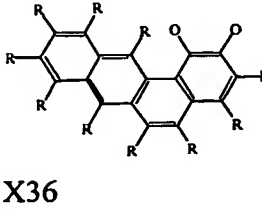
N,N'-(2,6-pyridinediyl-diethylidene)bis[2-*iso*-propyl-benzenamine] cobalt(I)
[phenanthrene-9,10-diolate],

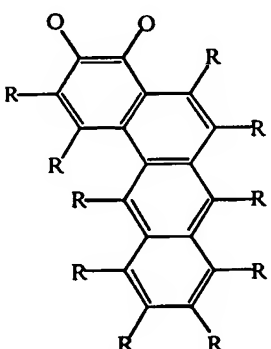
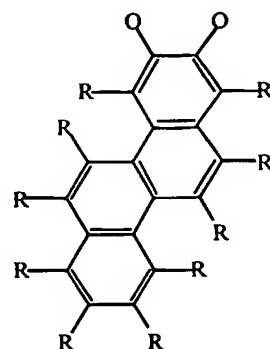
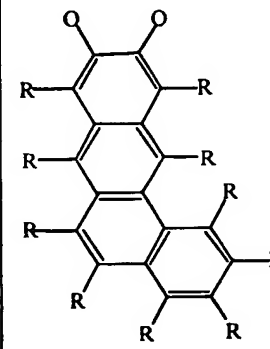
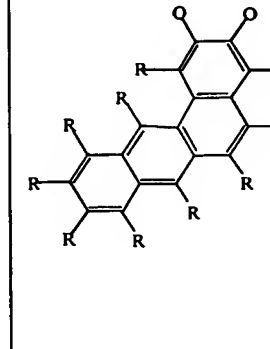
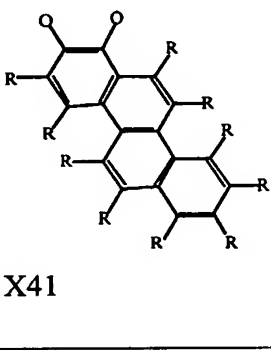
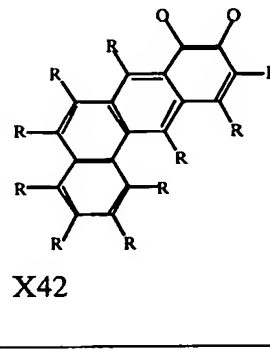
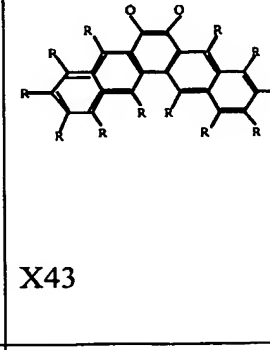
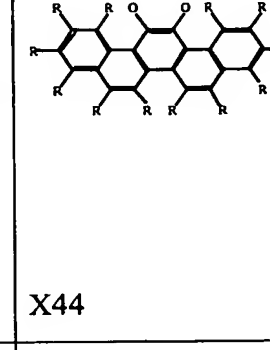
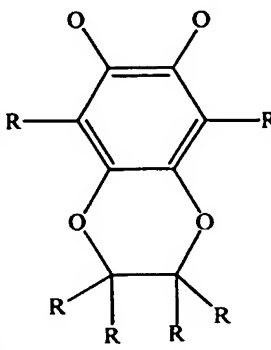
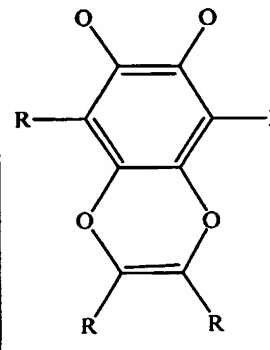
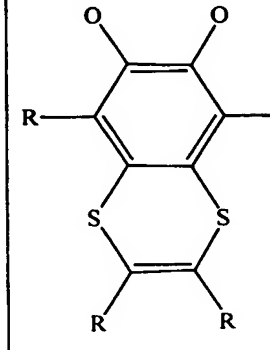
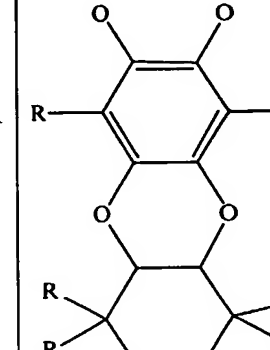
or any of the above compounds where "cobalt(I)" is replaced with platinum(II),
palladium(II), nickel(II), iron(II), copper(I), or cobalt(II) and where "nickel(II)" is
replaced with platinum(II), palladium(II), cobalt(I), iron(II), copper(I), or cobalt(II).

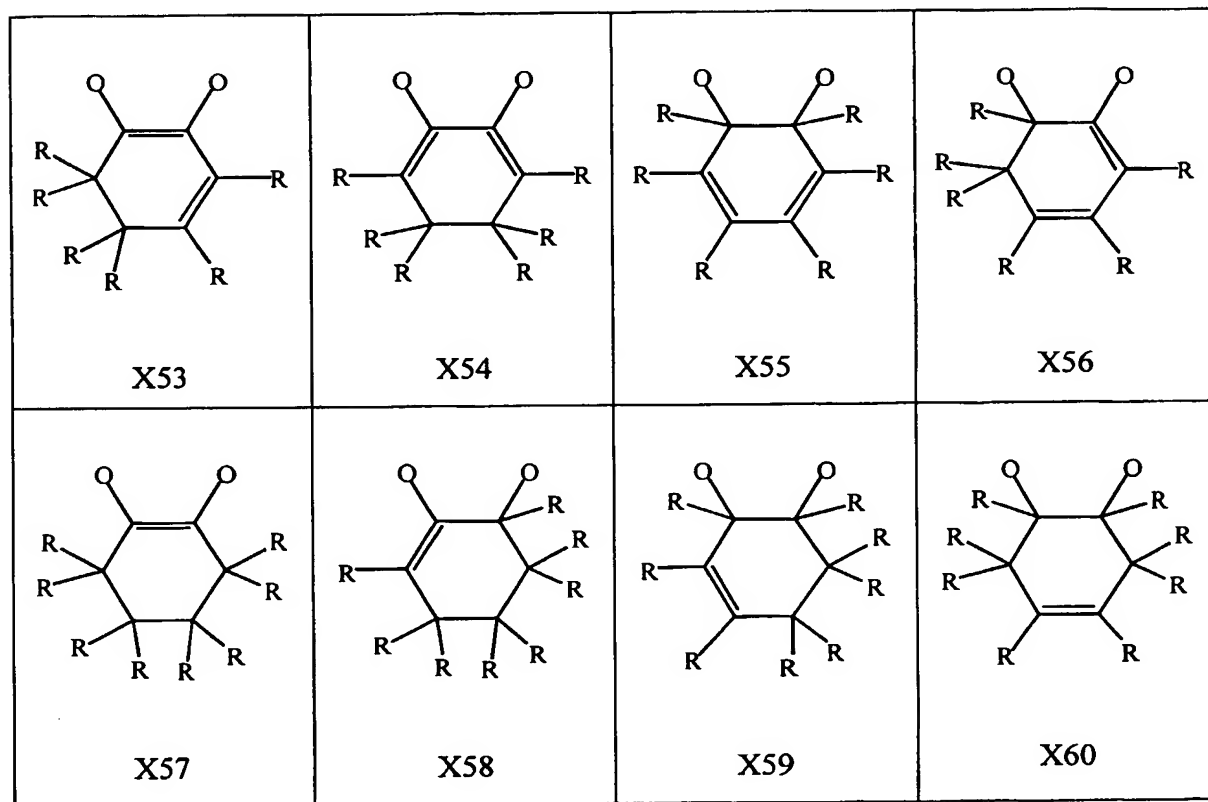
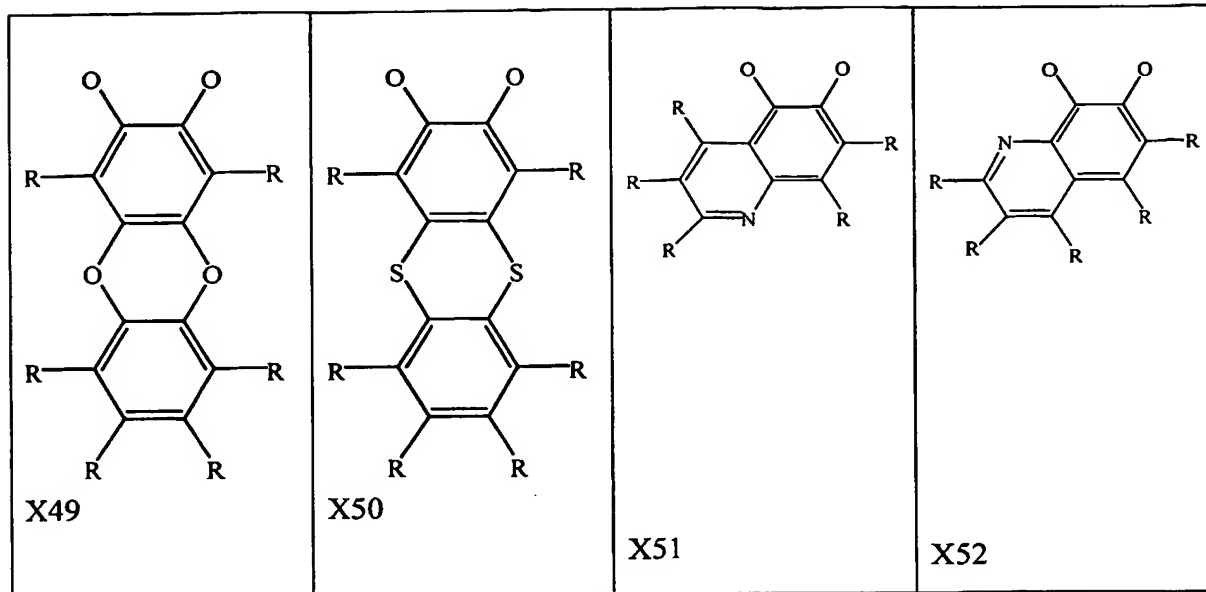
16. The compound of any of claims 1 to 13 where X is represented by the formulae:

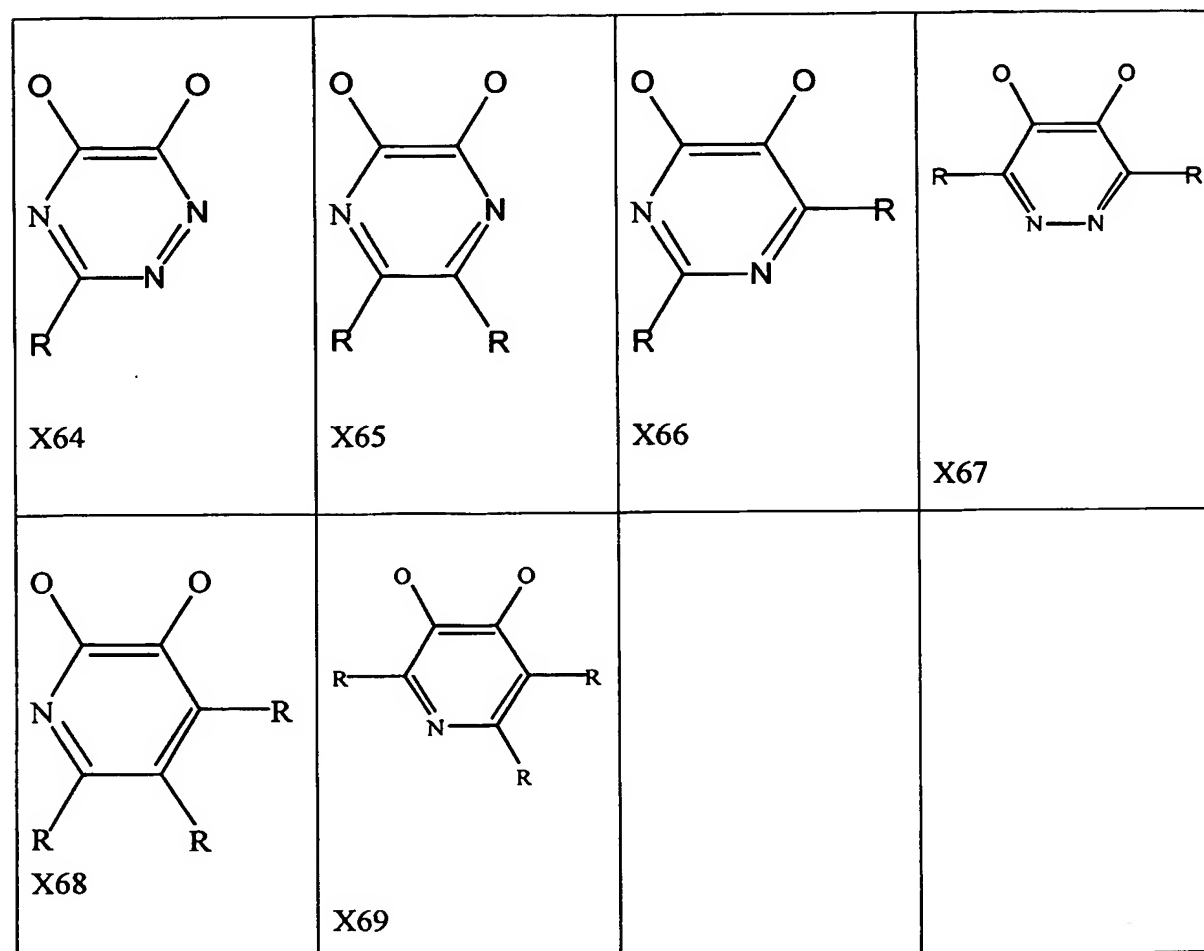
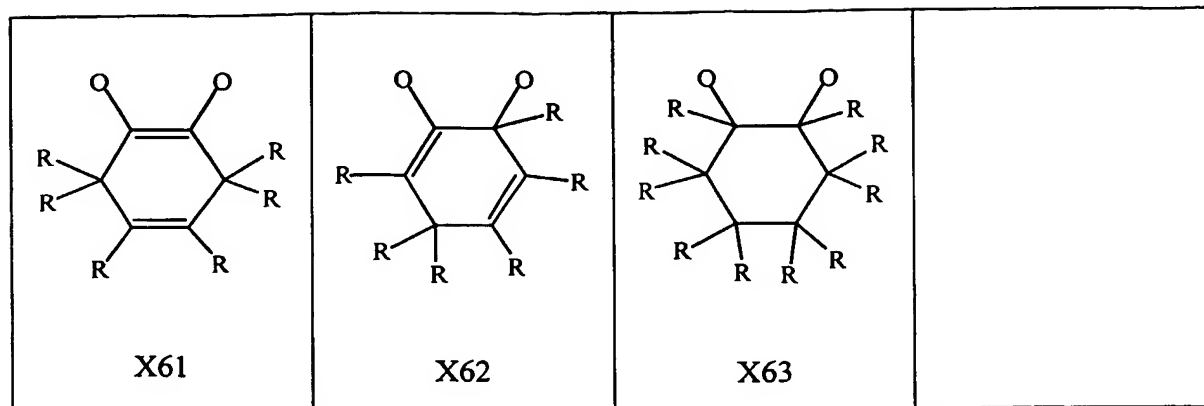


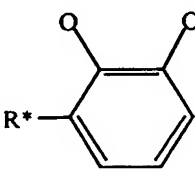
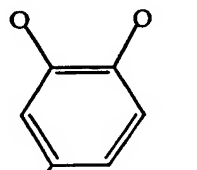
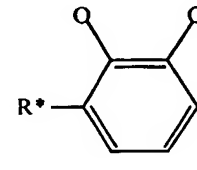
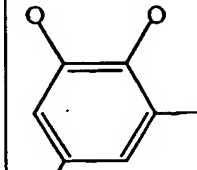
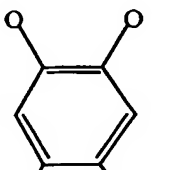
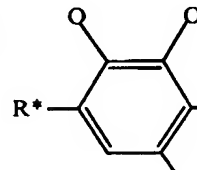
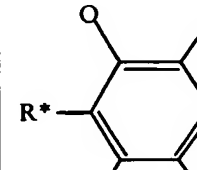
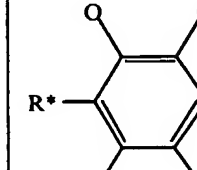
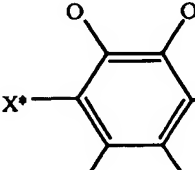
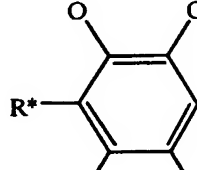
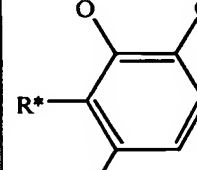
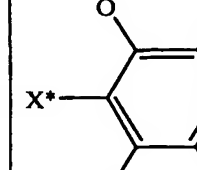
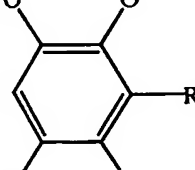
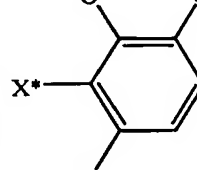
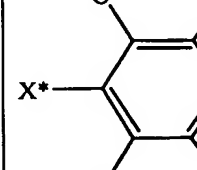
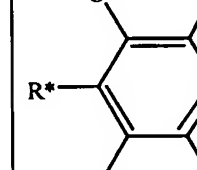


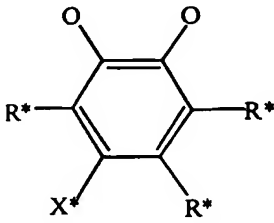
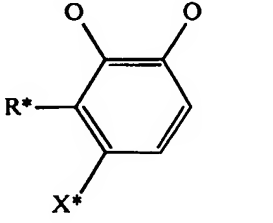
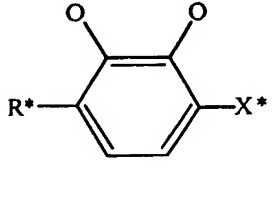
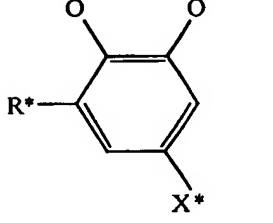
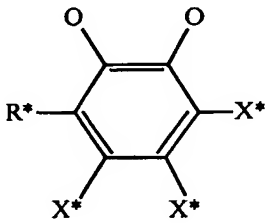
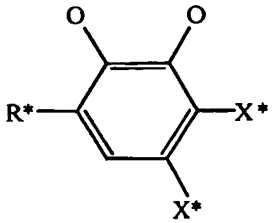
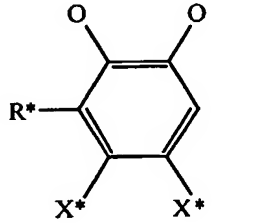
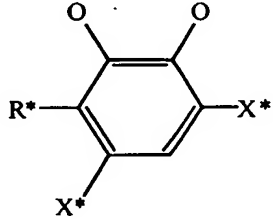
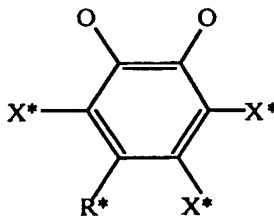
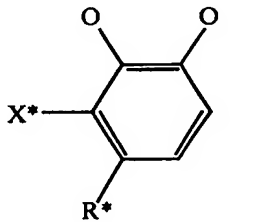
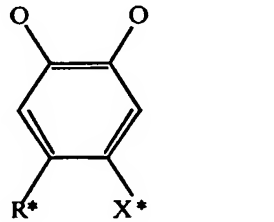
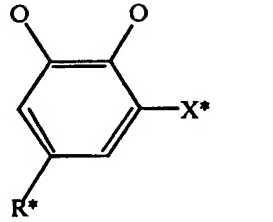
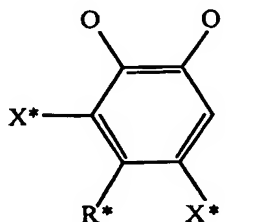
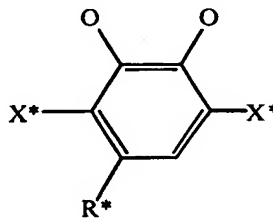
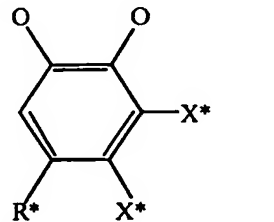
| | | | |
|--|--|---|--|
|  <p>X21</p> |  <p>X22</p> |  <p>X23</p> |  <p>X24</p> |
|  <p>X25</p> |  <p>X26</p> |  <p>X27</p> |  <p>X28</p> |
|  <p>X29</p> |  <p>X30</p> |  <p>X31</p> |  <p>X32</p> |
|  <p>X33</p> |  <p>X34</p> |  <p>X35</p> |  <p>X36</p> |

| | | | |
|--|--|---|--|
|  <p>X37</p> |  <p>X38</p> |  <p>X39</p> |  <p>X40</p> |
|  <p>X41</p> |  <p>X42</p> |  <p>X43</p> |  <p>X44</p> |
|  <p>X45</p> |  <p>X46</p> |  <p>X47</p> |  <p>X48</p> |





| | | | |
|--|--|--|--|
|  X70 |  X71 |  X72 |  X73 |
|  X74 |  X75 |  X76 |  X77 |
|  X78 |  X79 |  X80 |  X81 |
|  X82 |  X83 |  X84 |  X85 |

| | | | |
|--|--|--|--|
|  X86 |  X87 |  X88 |  X89 |
|  X90 |  X91 |  X92 |  X93 |
|  X94 |  X95 |  X96 |  X97 |
|  X98 |  X99 |  X100 | |

where each R is, independently, selected from the group consisting of hydrogen, methyl, ethyl, ethenyl, ethynyl and all isomers of propyl, butyl, pentyl, hexyl, heptyl, octyl, nonyl, decyl, undecyl, dodecyl, tridecyl, tetradecyl, pentadecyl, hexadecyl, heptadecyl, octadecyl, nonadecyl, eicosyl, heneicosyl, docosyl, tricosyl, tetracosyl, pentacosyl, hexacosyl, heptacosyl, octacosyl, nonacosyl, triacontyl, propenyl, butenyl, pentenyl, hexenyl, heptenyl, octenyl, nonenyl, decenyl, undecenyl, dodecenyl, tridecenyl, tetradecenyl, pentadecenyl, hexadecenyl, heptadecenyl, octadecenyl, nonadecenyl, eicosenyl, heneicosenyl, docosenyl, tricosenyl, tetracosenyl, pentacosenyl, hexacosenyl, heptacosenyl, octacosenyl, nonacosenyl, triacontenyl, propynyl, butynyl, pentynyl, hexynyl, heptynyl, octynyl, nonynyl, decynyl, undecynyl, dodecynyl, tridecynyl, tetradecynyl, pentadecynyl, hexadecynyl, heptadecynyl, octadecynyl, nonadecynyl, eicosynyl, heneicosynyl, docosynyl, tricosynyl, tetracosynyl, pentacosynyl, hexacosynyl, heptacosynyl, octacosynyl, nonacosynyl, and triacontynyl, phenyl, naphthyl, anthracenyl, pyrenyl, biphenyl, benzyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl, cyclooctyl, cyclononyl, cyclodecyl, cycloundecyl, cyclododecyl, fluoro, chloro, bromo, iodo, trimethylsilyl, triethylsilyl, tripropylsilyl, dimethylethylsilyl, diethylmethylsilyl, trimethoxysilyl, tirethoxysilyl, tripropoxysilyl, methoxy, ethoxy, propoxy, butoxy, phenoxy, or a nitro, carboxylic acid, ester, ketone (excluding 1,2-diketones) or aldehyde group, provided that two R groups can connect to form substituted or unsubstituted, saturated, partially unsaturated or aromatic ring structures; and each X* is, independently, F, Cl, Br, I, OR**, SR**, NR**₂, PR**₂, or NO₂; and each R* and each R** are, independently, selected from the group consisting of methyl, ethyl, *n*-propyl, *iso*-propyl, *n*-butyl, *sec*-butyl, *tert*-butyl, and cyclohexyl.

17. The compound of claim 16, where R* is *tert*-butyl or *iso*-propyl, R** is methyl, and X* is F, Cl, Br or OR**.
18. The compound of any of claims 1 to 13 where each X is independently selected from the group consisting of ZETA-CATACHOLATES.

19. The composition of any of claims 1 to 13 where each X is independently selected from the group consisting of THETA-CATACHOLATES.
20. A catalyst system comprising an activator and the compound of any of the above claims.
21. The catalyst system of claim 20 wherein the activator comprises an alumoxane and or a modified alumoxane.
22. The catalyst system of claim 20 wherein the activator comprises methyl alumoxane and or modified methyl alumoxane.
23. The catalyst system of claim 20 wherein the activator comprises $[\text{Me}_2\text{PhNH}][\text{B}(\text{C}_6\text{F}_5)_4]$, $[\text{Ph}_3\text{C}][\text{B}(\text{C}_6\text{F}_5)_4]$, $[\text{Me}_2\text{PhNH}][\text{B}((\text{C}_6\text{H}_3-3,5-(\text{CF}_3)_2))_4]$, $[\text{Ph}_3\text{C}][\text{B}((\text{C}_6\text{H}_3-3,5-(\text{CF}_3)_2))_4]$, $[\text{Bu}_3\text{NH}][\text{BF}_4]$, $[\text{NH}_4][\text{PF}_6]$, $[\text{NH}_4][\text{SbF}_6]$, $[\text{NH}_4][\text{AsF}_6]$, $[\text{NH}_4][\text{B}(\text{C}_6\text{H}_5)_4]$, $\text{B}(\text{C}_6\text{F}_5)_3$ and/or $\text{B}(\text{C}_6\text{H}_5)_3$.
24. The catalyst system of claim 20 wherein the activator is an ionic stoichiometric activator compound.
25. The catalyst system of claim 20 wherein the activator is a neutral stoichiometric activator compound.
26. The catalyst system of claim 20 wherein the activator is a non-coordinating anion.
27. The catalyst system of claim 20 wherein the activator is selected from the group consisting of: trimethylammonium tetraphenylborate, triethylammonium tetraphenylborate, tripropylammonium tetraphenylborate, tri(*n*-butyl)ammonium tetraphenylborate, tri(*tert*-butyl)ammonium tetraphenylborate, N,N-dimethylanilinium tetraphenylborate, N,N-diethylanilinium tetraphenylborate, N,N-dimethyl-(2,4,6-trimethylanilinium) tetraphenylborate, trimethylammonium tetrakis(pentafluorophenyl)borate,

triethylammonium tetrakis(pentafluorophenyl)borate, tripropylammonium tetrakis(pentafluorophenyl)borate, tri(*n*-butyl)ammonium tetrakis(pentafluorophenyl)borate, tri(*sec*-butyl)ammonium tetrakis(pentafluorophenyl)borate, N,N-dimethylanilinium tetrakis(pentafluorophenyl)borate, N,N-diethylanilinium tetrakis(pentafluorophenyl)borate, N,N-dimethyl-(2,4,6-trimethylanilinium) tetrakis(pentafluorophenyl)borate, trimethylammonium tetrakis-(2,3,4,6-tetrafluorophenyl) borate, triethylammonium tetrakis-(2,3,4,6-tetrafluorophenyl)borate, tripropylammonium tetrakis-(2,3,4,6-tetrafluorophenyl)borate, tri(*n*-butyl)ammonium tetrakis-(2,3,4,6-tetrafluorophenyl)borate, dimethyl(*tert*-butyl)ammonium tetrakis-(2,3,4,6-tetrafluorophenyl)borate, N,N-dimethylanilinium tetrakis-(2,3,4,6-tetrafluorophenyl)borate, N,N-diethylanilinium tetrakis-(2,3,4,6-tetrafluorophenyl)borate, N,N-dimethyl-(2,4,6-trimethylanilinium) tetrakis-(2,3,4,6-tetrafluorophenyl)borate, trimethylammonium tetrakis(perfluoronaphthyl)borate, triethylammonium tetrakis(perfluoronaphthyl)borate, tripropylammonium tetrakis(perfluoronaphthyl)borate, tri(*n*-butyl)ammonium tetrakis(perfluoronaphthyl)borate, tri(*tert*-butyl)ammonium tetrakis(perfluoronaphthyl)borate, N,N-dimethylanilinium tetrakis(perfluoronaphthyl)borate, N,N-diethylanilinium tetrakis(perfluoronaphthyl)borate, N,N-dimethyl-(2,4,6-trimethylanilinium) tetrakis(perfluoronaphthyl)borate, trimethylammonium tetrakis(perfluorobiphenyl)borate, triethylammonium tetrakis(perfluorobiphenyl)borate, tripropylammonium tetrakis(perfluorobiphenyl)borate, tri(*n*-butyl)ammonium tetrakis(perfluorobiphenyl)borate, tri(*tert*-butyl)ammonium tetrakis(perfluorobiphenyl)borate, N,N-dimethylanilinium tetrakis(perfluorobiphenyl)borate, N,N-diethylanilinium tetrakis(perfluorobiphenyl)borate, N,N-dimethyl-(2,4,6-trimethylanilinium) tetrakis(perfluorobiphenyl)borate, trimethylammonium tetrakis(3,5-bis(trifluoromethyl)phenyl)borate, triethylammonium tetrakis(3,5-bis(trifluoromethyl)phenyl)borate, tripropylammonium tetrakis(3,5-bis(trifluoromethyl)phenyl)borate, tri(*n*-butyl)ammonium tetrakis(3,5-

bis(trifluoromethyl)phenyl)borate, tri(*tert*-butyl)ammonium tetrakis(3,5-bis(trifluoromethyl)phenyl)borate, N,N-dimethylanilinium tetrakis(3,5-bis(trifluoromethyl)phenyl)borate, N,N-diethylanilinium tetrakis(3,5-bis(trifluoromethyl)phenyl)borate, N,N-dimethyl-(2,4,6-trimethylanilinium) tetrakis(3,5-bis(trifluoromethyl)phenyl)borate, di-(*iso*-propyl)ammonium tetrakis(pentafluorophenyl)borate, and dicyclohexylammonium tetrakis(pentafluorophenyl)borate, tri(*o*-tolyl)phosphonium tetrakis(pentafluorophenyl)borate, tri(2,6-dimethylphenyl)phosphonium tetrakis(pentafluorophenyl)borate, tropillium tetraphenylborate, triphenylcarbenium tetraphenylborate, triphenylphosphonium tetraphenylborate, triethylsilylium tetraphenylborate, benzene(diazonium)tetraphenylborate, tropillium tetrakis(pentafluorophenyl)borate, triphenylcarbenium tetrakis(pentafluorophenyl)borate, triphenylphosphonium tetrakis(pentafluorophenyl)borate, triethylsilylium tetrakis(pentafluorophenyl)borate, benzene(diazonium) tetrakis(pentafluorophenyl)borate, tropillium tetrakis-(2,3,4,6-tetrafluorophenyl)borate, triphenylcarbenium tetrakis-(2,3,4,6-tetrafluorophenyl)borate, triphenylphosphonium tetrakis-(2,3,4,6-tetrafluorophenyl)borate, triethylsilylium tetrakis-(2,3,4,6-tetrafluorophenyl)borate, benzene(diazonium) tetrakis-(2,3,4,6-tetrafluorophenyl)borate, tropillium tetrakis(perfluoronaphthyl)borate, triphenylcarbenium tetrakis(perfluoronaphthyl)borate, triphenylphosphonium tetrakis(perfluoronaphthyl)borate, triethylsilylium tetrakis(perfluoronaphthyl)borate, benzene(diazonium) tetrakis(perfluoronaphthyl)borate, tropillium tetrakis(perfluorobiphenyl)borate, triphenylcarbenium tetrakis(perfluorobiphenyl)borate, triphenylphosphonium tetrakis(perfluorobiphenyl)borate, triethylsilylium tetrakis(perfluorobiphenyl)borate, benzene(diazonium) tetrakis(perfluorobiphenyl)borate, tropillium tetrakis(3,5-bis(trifluoromethyl)phenyl)borate, triphenylcarbenium tetrakis(3,5-bis(trifluoromethyl)phenyl)borate, triphenylphosphonium tetrakis(3,5-bis(trifluoromethyl)phenyl)borate, triethylsilylium tetrakis(3,5-

bis(trifluoromethyl)phenyl)borate, and benzene(diazonium) tetrakis(3,5-bis(trifluoromethyl)phenyl)borate.

28. The catalyst system of any of claim 20 to 27 further comprising a co-activator.
29. A composition comprising a compound of any of claims 1 to 19 and a support.
30. A composition comprising a catalyst system of any of claims 20 to 28 and a support.
31. The composition of claim 29 or 30 where the support comprises one or more Group-2, -3, -4, -5, -13, or -14 metal or metalloid oxides.
32. The composition of claim 29 or 30 where the support comprises silica, alumina, silica-alumina, or mixtures thereof.
33. The composition of claim 29 or 30 where the support is silica.
34. A method to polymerize an unsaturated monomer comprising contacting the monomer with the catalyst system of any of claims 20 to 28.
35. A method to polymerize an unsaturated monomer comprising contacting the monomer with the composition of any of claims 30 to 34.
36. A method to oligomerize an unsaturated monomer comprising contacting the monomer with the catalyst system of any of claims 20 to 28.
37. A method to oligomerize an unsaturated monomer comprising contacting the monomer with the composition of any of claims 30 to 34.
38. The method of any of claims 34 to 37 where the monomer comprises one or more C₂ to C₁₀₀ olefins.
39. The method of any of claims 34 to 37 where the monomer comprises one or

more of ethylene, propylene, butene, pentene, hexene, heptene, octene, nonene, decene, dodecene, 4-methylpentene-1, 3-methylpentene-1, 3,5,5-trimethylhexene-1, and 5-ethylnonene-1.

40. The method of any of claims 34 to 38 where the monomer comprises ethylene.
41. The method of any of claims 34 to 38 where the monomer comprises propylene.
42. The transition metal compound of any of claims 1 and 5-19 wherein M is nickel, the compound is dimagnetic and the coordination sphere of the compound is arranged in a square planar geometry.
43. The compound of claim 1, 2, 3, or 4 wherein L is selected from the group consisting of IOTA-LIGANDS.
44. A catalyst system comprising the compound of claim 42 or 43, an activator and an optional support.
45. A method to oligomerize or polymerize an unsaturated monomer comprising contacting the monomer with the catalyst system of claim 44.
46. The method of any of claims 34, 35, 36, 37, 38, 39, 40, 41 or 45 wherein the monomer comprises one or more norbornenes, substituted norbornenes, cyclopentadienyls or substituted cyclopentene.